The JOURNAL
of the Michigan State Medical Society
ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL
VOLUME 41 JANUARY, 1942 NUMBER 1

Choice of Anaesthesia in Emergency Surgery*

By Wesley Bourne, M.D.,
Montreal, Canada

WESLEY BOURNE, M.D.

M.D., C.M., McGill University, 1911; M.Sc., McGill, 1924; F.R.C.P., Canada, 1931; D.A. (R.C.P. & S. Eng.), 1938. First Hickman Medallist Roy. Soc. of Medicine, 1935. Lieutenant-Colonel, R.C.A.M.C. Lecturer (Anesthesia) Department of Pharmacology. McGill University. Author of many publications on anesthesia. Member of the American Society for Pharmacology and Experimental Therapeutics.

. . . ., and with his knife cut forth
The rankling point; with tepid lotion, next,
He cleans'd the gore, and cast a bitter root,
Bruis'd small between his palms, into the wound.
At once, the anodyne his pains assuag'd,
Dried the deep hurt, and stanch'd the sable stream.
Cowper, The Iliad of Homer, XI, 1026.

NOTHING in American literature is more admirable than Henry Thoreau's devotion to his principles. So says Granville Hicks in *The Great Tradition.* He further declares that the wisdom of Emerson and the courage of Thoreau might have inspired a nation of heroes. The subtlety of Hawthorne might have guided a generation of craftsmen. But the writers of the period following your intestine war could not bring the glories of the Golden Day into the expansive age. Emulating Emerson, the preacher of sturdy individualism, Whitman became the preacher of self-reliance; to use his own words from his *Song of the Broad-Axe,* he became bard of "The beauty of independence, departure, actions that rely on themselves." It would appear that in Medicine, generally, his voice was heard. How else the many specialties?—behold the personnel! Any one of whom circumscribed within his own line of thought, may easily suffer from pervasive complacency over the importance of his calling and fail to see other factual matters, perhaps of vital moment. Rather would it be better for him to view them all in full perspective. Let him remember such a dictum as that lately given out by L. J. Henderson,[6] of Harvard—"In the medical sciences testing of thought by observation and experiment is continuous. Thus theories and generalizations of all kinds are constantly being corrected, modified and adapted to the phenomena, and fallacies of misplaced concreteness eliminated." We should endeavour, therefore, to determine the procedure of anæsthesia always with the greatest care, but most particularly in emergency surgery.

Selection in anæsthesia for emergency surgery is extremely important chiefly for the reasons that the patient comes to operation without preparation, often with a stomach full of food, and frequently severely shocked. It is appropriate, at the present time, to consider this selection on account of the casualties of war. Continually remembering the *a priori* principle that whatever is to be done must suit the general condition as well as the surgical requirements of a given individual; realizing that the precepts of anæsthesia are not affected by the circumstances of emergency; and resolving assiduously to seek those means in anæsthesia which are especially applicable under the exigencies of emergency, whether of battle or from among the wheels of industry; mindful of these, the physician, the surgeon and the anæsthetist will discuss the case cooperatively and choose the drugs to be used along with the methods of their administration.

*Read, by invitation, at the Seventy-sixth Annual Meeting of the Michigan State Medical Society, September 19, 1941, Grand Rapids, Michigan.

I shall strive to show that, although men of the fighting services, and, too, men and women of the industries, are of necessity exceptionally fit before an engagement or a bombing raid, they may frequently be most urgently in need of the best attention known to anæsthesia. Furthermore, I shall not fail to consider those emergencies we are called upon to meet from among civilians, male and female, of all ages and in all sorts of condition, including those who suffer definite additional disability over and above that demanding immediate surgical intervention, whether due to violence or acute illness. Whatever the circumstances, they are to be dealt with as they variously obtain. It is not inapposite to say that there is no reason why an otherwise healthy individual who becomes a subject for emergency surgery should not be accorded the highest quality of anæsthesia, conducted by a most capable anæsthetist, especially in times of war. Surely those who are willingly exposing themselves to the dangers of war deserve our best consideration. In words like those of Cicero: with such thoughts before you, no eloquence of any man's is needed to excite your feelings.

Broadly, choice in anæsthesia is made within the greater groupings of Regional Anæsthesia and of General Anæsthesia, in this, whether it be inhalation or intravenous; while in that, whether "local" or "spinal." It is convenient, at this time, to consider the anæsthetic materials jointly with means of their administration, and I shall intimate their suitabilities to the surgical procedures under varying circumstances regarding the patient's condition.

Choice of Local Anæsthetic

The drugs just now in favour for producing regional anæsthesia are procaine, metycaine, nupercaine, and pontocaine. In effect, they cause little, if any, interference with the vital processes, therefore, their employment should be encouraged. Although, in execution, local infiltration, field block, the different forms of nerve block, and spinal anæsthesia are found by a large number of surgeons to be tedious and time consuming; yet, as these have become, in many instances, parts of the duties of the anæsthetist, in consequence, not only is the surgeon relieved of some burden, but, through increased individual experience, the dangers are now almost negligible. So long as preliminary sedation has been made complete—concerning this aspect of the question I shall have a word to say presently—the local and block types of anæsthesia may be considered almost ideal for operations on the head, neck and extremeties; and even, in the abdomen as well as the thorax on those rare occasions when spinal anæsthesia may not be carried out on account of the inadvisability of moving the patient. The advantages of spinal anæsthesia are very great, especially on account of the muscular relaxation and the excellent recovery. Digby Leigh and I[8] have shown that, with the exception of blood dilution, the many changes[1] which are apt to take place from general anæsthesia do not appear in spinal anæsthesia. Let it be remembered that some of these changes in metabolism may seriously impede the course of convalescence in the patient who suffers some extensive debilitating lesion.[2] Just now I am very disposed to use percaine for spinal anæsthesia as it lasts longer than any of the others, and I favour the Etherington-Wilson technique for its administration[3,5] as with the sitting posture much less of the drug is required. It would seem that spinal anæsthesia is only contraindicated wherein the fall of blood pressure, which it frequently causes, is to be feared, as in cases of marked hypertension and advanced cardiovascular disease. Such are not likely to be met among war casualties from the personnel of the fighting forces or of factories, but they are being seen among those of civil life in the present conflict.

Premedication

It is at this conjuncture that I deem it most relevant to discuss the problem of pre-medication, that is, just before quite leaving the topic of regional anæsthesia; and then, it will not be impertinent to interject something about the analeptics, seeing that they are being used so much in this type of anæsthesia. I have come seriously to the conclusion that it is our bounden duty to do all in our power, so thoroughly to subdue the activities of the cerebral cortex, as utterly to induce the prerequisite of salubrious hebetude of the organs of thought. Even in the greatest emergency, without the patient is unconscious, there is time for some persuasive ritual on the part of those in attendance. We read in the Book

of Job,[7] "But I would strengthen you with my mouth, and the moving of my lips should asswage your grief." So wise and sensible talk, uttered in that soft, melodious tone which gives such a peculiar charm to utterances, will inspire confidance and gain reliance prior to or while giving one or more of the sedatives: morphine, dilaudid, a barbiturate such as nembutal or pentothal, avertin, and scopolamine or atropine. Usually, it matters little how these are combined, only one tries to give enough to produce the desired effects, that is, completely to obnubilate all perceptions, and so lessen the shock which comes of fear; effectually to inhibit secretions, and so avoid respiratory obstruction; appreciably to reduce the amount of general anæsthetic, when such is used; and, wisely to cause the induction of anæsthesia to be much easier. Thinking about it in another way, one attempts to give just enough of these drugs to produce the desired effects without too much interference with the respiratory movements, too much depression of the circulation, without disturbances to the oxidation—reduction systems. In other words, unless the subject of emergency surgery is already inconscient, he should have enough narcotic so that it may be said, with Ovid, "the time was come when you could not say 'twas dark or light; it was the borderland of night, yet with a gleam of day."[11] It would make little difference whether the light were crepuscular or like that of "the garden between dawn and sunrise"—the language of James Branch Cabell.

Someone will say that all this savours of being rather intrepid, this argument in favour of "high spinal" and of relatively large quantities of sedatives! No doubt knowledge of the usefulness of analeptics had some influence in the undertaking and the results justify the means, all the more as these were carried out cautiously. But I am firmly of the opinion that analeptics should not be used regularly nor in anticipation of shock. With apparently the sole exception of neosynephrin, they tend to stimulate the central nervous system and to reverse the effects of sedatives, for example, in spinal anæsthesia, when morphine and scopolamine have been given especially to produce their desired actions, I have found that these beneficial effects will be definitely minimized by the administration of a mixture of ephedrine and posterior pituitary extract. Why waywardly undo that which was deliberately done with good reason? It has been shown that analeptics are not needed in spinal anæsthesia by the Etherington-Wilson technique, even in upper chest surgery, in about 70 per cent of cases.[4] A most remarkable synergistic effect takes place when posterior pituitary extract, if you like, in the form of pitressin, is given along with ephedrine.[10] The one supplements and enormously augments the power of the other, the result being more effective than larger individual quantities of these drugs in restoring blood pressure and respiration and in abolishing general collapse. Usually, when these materials are needed, their hypodermic administration suffices. The intravenous avenue is not recommended unless the patient is very far gone. Stimulation of this sort is seldom required in general anæsthesia, in truth, with cyclopropane the circulation might become quite encumbered. Thus we see that antithetical circumstances about the use of depressing drugs on the one hand, and those for stimulation on the other, are prompting our contemplation at one and the same time.

General vs. Regional Anæsthesia

This, my support of regional anæsthesia, may sound like renunciation of previously published reports in favour of general anæsthesia. Such is not the case. Rather is it like holding categories fluidly, like having flexible standards. It seems true that the intravenous method of general anæsthesia is not suitable for other circumstances than those of minor surgery or for the induction of anæsthesia prior to employing other agents, as is done by Lundy.[9] It appears to be too meticulous a procedure to administer such a drug as pentothal intravenously for an operation of more than twenty minutes, or to give it fractionally. The focal points of attraction in inhalation anæsthesia, the climactic moments of late years are, the closed intratracheal technique,[14] the absorption of carbon dioxide,[12] and the use of cyclopropane.[13] Although ether still has a definite place in surgery, although it may be used with relative safety by those who are not too well experienced, and although, when better equipment is not at hand, it is quite permissible to give ether by the "open drop" method; yet now-a-days all surgical centres, including those that are military, will have an adequate number of anæsthetic machines from which nitrous

oxide, cyclopropane or ether may be administered alone or with one another. The advantages of cyclopropane are already too well known for further prolixity in the matter, but it may be said that there are two splendid combinations: one of avertin by rectum with cyclopropane, following by inhalation; the other of pentothal by vein, with cyclopropane by inhalation immediately after. In each instance a smaller-than-usual dose of the first drug is given, the production of full anæsthesia by cyclopropane is done much more easily than ordinarily, and, there would seem to be some salutary synergistic action. In busy periods, however, the giving of avertin takes too much time. So much for the first cynosure. The second point of attraction: the removal of poisonous excesses of carbon dioxide from the expired air, while it permits in the same case, the continued and repeated use of the anæsthetic gases or vapours, constitutes a worthy economy. The third climactic moment: the closed intratracheal method, precludes respiratory obstruction; obviates interference with some surgical procedures, such as in operations about the head, neck and chest; gives absolute assurance of a plentiful supply of oxygen directly to the lungs; affords quieter breathing and a softer abdomen, although narcosis is not profound; and provides the ready application of Guedel's method of artificial respiration.

General Considerations

All that has been said, so far, pertains cogently, to the choice of anæsthesia in emergency surgery, and while there is a great deal more, which time does not permit the recounting, a few general statements may be made still pertinent to the subject. Emergency cases manifesting shock are to be handled with the greatest circumspection and with the least possible surgical intervention, until the state of the blood circulation is restored. Any such patient must be allowed to recover fairly well from the early physical condition of depression, before an operation is attempted. During the interval, to conserve energy, one may give small doses of opiates, such as morphine and scopolamine, with vigilance in regard to respiratory depression; one selects to give supporting intravenous fluids, until the pulse rate decreases and the blood pressure goes up considerably; and, one chooses to apply heat for the restoration of body temperature. So soon as these circumstances have been rendered relatively stable, as evidenced from frequent observations on the character of the breathing, the rate of the pulse and the degree of the blood pressure; not until these three seem to be on a satisfactory scale, in relation to one another, should the patient be considered ready for operation. Overlooking the lesser ailments, let us follow a little the course of anæsthesia during operation for a major lesion. Having, in a given individual, chosen the drugs and the methods of their administration, and having produced the required degree of narcosis, it becomes the anæsthetist's selective duty carefully to manage its progress. Before the operation is started, the intravenous administration of fluids ought to be begun and continued throughout at a rate suitable to the state of the blood pressure and character of the pulse. Of the clear solutions, that of glucose in saline should be used in the regional anæsthesia cases, and that of saline only should be given to the cases of general anæsthesia for the simple reason that in these there is invariably a hyperglycemia at the time. Either may be replaced by blood or plasma very readily. Into this fluid stream may be added without delay either analeptic and resuscitating, or sedative drugs momentarily. Restlessness, which occasionally occurs during regional anæsthesia, can be controlled promptly by the injection of a morphine solution into the intravenous tube. Analeptics, too, may be given in this way. When modern machines are used a liberal supply of oxygen is assured during inhalation anæsthesia, but in the spinal procedure one is well advised, regularly and actively, to administer oxygen on account of the depressed breathing, the sluggish circulation, and the dilution of the blood; in other words, on account of the impoverished respiratory exchange and the reduced oxygen-carrying-power of the blood. It becomes the anæsthetist to be alert in these matters and even to have a hand in the immediate after-care of the patient.

In closing this rather discursive account concerning the choice of anæsthesia in emergency surgery, let me say to you that as the *bay-leaf* was sacred to Apollo and hence was conducive to eloquence, so I wish that I could have come to you with a bay-leaf in my mouth and dealt with the matter more clearly. However, in something like the language of the mystic William Blake;

as Chaucer numbered the classes of men, as Linneus numbered the plants, and as Newton numbered the stars, so let the physician, the surgeon and the anæsthetist measure the procedure of choice in anæsthesia.

References

1. Bourne, Wesley: Anæsthesia for the Republic of Plato. Yale Jour. Biol. and Med., 11:149, 1938.
2. Bourne, Wesley: Surgical procedures on the handicapped patient: Factors determining selection and administration of anæsthetics. Surg., Gyn., and Obs., 68:519, 1939.
3. Bourne, Wesley, and O'Shaughnessy, P. E.: The Etherington-Wilson technique in intrathecal analgesia. Can. Med. Assoc. Jour., 35:536, 1936.
4. Bourne, Wesley, Leigh, M. Digby, and Inglis, A. N. Spinal anæsthesia for thoracic surgery. (To be published.)
5. Etherington-Wilson, W.: Intrathecal nerve root block. Some contributions and a new technique.. Proc. Roy. Soc. Med., 27:(pt. 1), 323, 1933-4.
6. Henderson, L. J.: The study of man. Science, 94:1, 1941.
7. Job, XVI, 5.
8. Leigh, Digby, and Bourne, Wesley: Work done at McGill University, Department of Pharmacology. Unpublished.
9. Lundy, John S.: Intravenous and regional anæsthesia. Ann. Surg., 110:878, 1939.
10. Melville, K. I.: Combined ephedrine-pituitary extract (posterior lobe) therapy in histamine shock. Jour. Pharmacol. and Exper. Therap., 44:279, 1932.
11. Miller, F. J.: Ovid's Metamorphoses, IV. 399-401. London: William Heinemann Ltd., 1921.
12. Waters, R. M.: Carbon dioxide absorption from anæsthetic atmospheres. Pros. Roy. Soc. of Med., 30:11, 1936.
13. Waters, R. M., and Schmidt, E. R.: Cyclopropane anæsthesia. Jour. A.M.A., 103:975, 1934.
14. Waters, R. M., Rovenstine, E. A., and Guedel, A. E.: Endotracheal anæsthesia. Anes. and Analg., 12:196, 1933.

MSMS

Modification of Open Mask for Administration of Vinethene Anesthesia

By Constantine Odén, M.D.
Muskegon, Michigan

CONSTANTINE L. A. ODEN, M.D.
B. S., University of Wisconsin, 1918. M.S., New York University, 1920. M.D., Bellevue Medical College, 1920. Attending Surgeon at Hackley and Mercy Hospitals, Muskegon. Nonresident Fellow of the Chicago Surgical Society; Associate Fellow of the American Proctologic Society; Fellow, American College of Surgeons. Member, Michigan State Medical Society.

■ VINETHENE is a volatile anesthetic for inhalation which is of great value when one desires a short period of anesthesia with easy induction, good relaxation and prompt recovery, with little or no postoperative effects as nausea or vomiting. Because vinethene is so volatile it has been difficult to use it on the open mask without using a great deal of the anesthetic, therefore the contents of the small bottle is often used up long before the operation is finished and a second or even a third bottle must be opened. Such waste seems avoidable, so the open mask was converted to a semi-open mask by reducing the area of evaporation, permitting enough free air, however, to be mixed with the vinethene when administered.

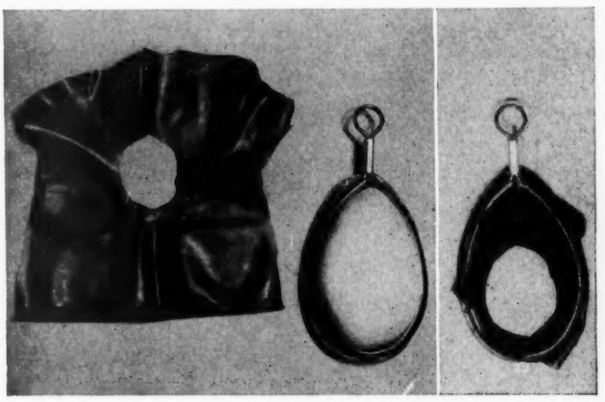


Fig. 1. (a) Hole cut in discarded glove sleeve. (b) Mask. (c) Rubber applied over gauze covered mask.

The modification consists simply in fitting a piece of oil silk or rubber with a center hole about 5 cm. in diameter over the regular gauze covered mask (Fig. 1). We place this over the face of the patient without using any towels to obstruct the entrance of air from under the mask.

Several years' experience with vinethene, using this method, has been very satisfactory. It has been used in shorter cases, as for reduction of simple fractures, dislocations, excision of carbuncles, opening of abscesses, adult circumcisions, and numerous other cases where the use of a shorter anesthetic was indicated.

Conclusion: The modified semi-open mask makes vinethene more easily administered, safe, and much more economical to use.

MSMS

HEALTH SERVICE ANNOUNCES EXAMINATION RESULTS

More than 91 per cent of the 873 new full-time students who entered Wayne University in September were given "Class A" ratings in physical examinations just completed, according to Dr. Irvin W. Sander, director of the Student Health Service. "A" students may participate without restriction in health-education activities; others are provided opportunities for mild or non-competitive exercise.

Eighteen per cent of the students examined showed no evidence of physical defects. Commonest impairments involved teeth, the nose and throat, vision, hearing, blood pressure, and kidneys. Students needing care were referred to their family physicians or dentists. —*Wayne University Newsletter*, November 19, 1941.

Coarctation of the Aorta*

A Case with Right Axis Deviation of the Electrocardiogram and Auricular Fibrillation with Some Statistics

By Hugh Stalker, M.D., F.A.C.P.
Detroit, Michigan

HUGH STALKER, M.D.
M.D., Harvard University Medical School, 1924. Fellow, American College of Physicians. Diplomate of the American Board of Internal Medicine. Instructor in Medicine at the Wayne University College of Medicine. Staff member of Harper and Children's Hospitals, Detroit and The Cottage Hospital, Grosse Pointe Farms. Member, Michigan State Medical Society.

■ COARCTATION (*co* together, and *arctare* to press or make tight) of the aorta is a stricture or stenosis of the aorta usually found at, or just proximal to, the junction with the ductus arteriosus.

Bonnet,[3] in 1903, described two types, the infantile and the adult. The infantile type is a diffuse narrowing, or a complete absence, of the isthmus (that part of the aorta between the left subclavian artery and the junction with the ductus Botalli). This form is commonly associated with other congenital anomalies and is not compatible with adult life, there having been reported in a series of nine cases a maximum of nine months and a mean of eight hours (Abbott[1] 1934). *Adult* coarctation is a constriction of the aorta at or near the junction of the ductus Botalli with the aorta.

Skoda[7] in 1871 suggested that in the adult type a portion of the tissue peculiar to the ductus extends into the adjacent aortic wall, and, as the atrophy of this tissue occurs, it results in constriction or occlusion of the aorta. The process is a comparatively slow postnatal development and adequate collateral circulation has time to become established.

Blackford[2] found that, in a series of 68,000 consecutive necropsies reported by six authors, coarctation of the adult type occurred forty-three times or an incidence of 1 in 1,588 necropsies. Fewer than 350 reports of this anomaly are to be found in the literature and the condition was diagnosed clinically in less than a fourth of these cases. The statistics clearly indicate that coarctation of the aorta exists far more frequently than is clinically appreciated. However, there has been an increase in the cases that have been reported in the last few years.

In a series of 200 cases of the adult type collected by Abbott[1] in 1928, the average age of death was close to thirty-two years with extremes of three and ninety-two years; sixty died of congestive heart failure; forty of sudden heart (two) or aortic (thirty-eight) rupture; twenty-six of cerebral complication and fourteen of bacterial endocarditis. In another group (Abbott, 1931) of 1,000 analyzed cases of congenital cardiac diseases, there were seventy (7 per cent) of the adult type of coarctation of the aorta.[9]

Of the 20,033 medical cases admitted to Harper Hospital during the past ten years, there were 2,719 (13.5 per cent) heart cases. Of these cases seven (0.26 per cent) were diagnosed as coarctation of the aorta—one of congenital coarctation and six of the adult type. The age of the congenital case was four months. The ages of the adult type ranged from seven to fifty-two (seven, twelve, thirteen, twenty-six, forty-eight, fifty-two); there were three females and four males.

Many cases[4] have been reported in detail and the embryology, pathological anatomy, clinical features, pathological physiology, and the roentgenographic findings of this entity have been discussed by many investigators. In high degree this is a rare anomaly but nonclinical types[6] are infrequent. It is found three times as frequently in men as women.

Case Report

History

The patient was apparently well up to 1927 when he had a cerebral accident, was unconscious for a few minutes and then developed a complete right hemiplegia. After about six months in bed, there was a gradual clearing of the paralysis except for a slight slurring of speech. From then to 1931 he was quite well, at which time he began to notice some dyspnea which gradually increased and was especially severe on exertion. In 1933 he began to use two pillows at night and also had several attacks of nocturnal dyspnea. He had not been able to work since 1931 because of dyspnea and was in bed on and off most of the time. In 1935 he began to notice swelling of his ankles for the first time. There was no cough and no precordial pain. There were no gastro-intestinal symptoms and there was nycturia 1 to 2. The patient was first seen by us in 1936 when his chief complaints were shortness of breath, swelling of ankles, a loss of 40 pounds in the last seven years, and night sweats for the past three to four years. He used alcohol in moderation,

*From the Cardiac Clinic of Harper Hospital.

but no tobacco or drugs. His appetite was good and his bowels were regular. There was slight deafness in the left ear.

Past History. Cerebral accident as above; appendectomy 1926. Had worked with blast furnace in presence of iron dust for fifteen years.

Marital History. Married twenty-three years. Wife living and well. Two daughters living and well.

Family History. Father died at eighty years, cause unknown. Mother living and well. One brother living and well. No history of any chronic familial disease.

Physical Examination

The positive findings were a well developed and nourished Italian male of medium weight and height, about forty-seven years of age. *Eyes*—The fundi showed neuroretinitis with a few peticheal hemorrhages. The vessels were tortuous and the end arteries were moderately so. The disc margins were slightly blurred. Class 2 hypertensive fundi. The neck veins were engorged and there were marked pulsations in the suprasternal notch. The chest was emphysematous and showed labored respirations. Wheezing musical expiratory râles were heard over the entire chest. Heart pulsations were noted over the whole precordium. The apex beat was diffuse. There were no thrills. The heart was enormously enlarged in all diameters. The rate was grossly irregular. There was a loud systolic and a presystolic murmur heard everywhere over the chest but the loudest over the mitral area and transmitted to the axilla and through to the back. The blood pressure in the left arm was 220/120; right arm 210/100; left thigh 130/110; right thigh 110/80. *Abdomen*—The liver was felt just beneath the costal margin. *Extremities*—There was marked pitting edema of ankles, feet, lower legs, and over sacrum. The reflexes on the right side were more pronounced than those on the left.

Electrocardiogram

Totally irregular rhythm. Right ventricular extra systoles. Marked RAD. Average ventricular rate 60. P replaced by continuous undulations. QRS equals 0.10 seconds. Notched in 2 and 3. T 1 slightly diphasic. T 2, 3 strongly inverted. S-T 1 lightly depressed. S-T 2, 3 frankly depressed. S-T 4 elevated. Q 4 absent (old terminology).

Laboratory Findings

The Kahn test was negative. The blood sugar 0.154; nonprotein nitrogen 39.9; vital capacity 1,700 c.c.; blood culture no growth. Hemoglobin 12 gms., 90 per cent (Sahli); red blood cells 6,670,000; white blood cells 10,650; stab neutrophiles 4 per cent; segmented 66 per cent; lymphocytes 30 per cent. Urine was acid; specific gravity 1.025; sugar negative; acetone negative; sediment few RBC; occasional WBC. Urine concentration test Vol. 200; specific gravity 1.018. Bleeding time seven minutes; clotting time four minutes. Muscle biopsies of pieces of left deltoid muscle and of vastus lateralis of left thigh showed on section striated muscle, normal blood vessels and nerve fibers with no pathological changes noted.[5]

Roentgenologic Examination

Examination showed marked left sided cardiac enlargement in the anteroposterior plane and absence of the transverse arch of the aorta as shown in the lateral plane. The tracheobronchial adenopathy was considerably in excess of normal. There was some fibrosis in the right lower lobe and a limited amount of atelectasis of the right lower lobe just lateral to the right border of the heart. The rib structure showed scalloping and sulcation. The forearms and legs were examined and the films revealed no evidence of calcification in the peripheral vessels and no abnormality in the bone structure.

Skin Temperature

The patient was exposed to room temperature of 26 degrees centigrade for one hour. At this time his skin temperatures were as follows:

	Right	Left
Big toe	28.4	30.0
Instep	30.0	32.5
Calf of leg	30.0	30.7
Above knee	30.0	30.5
Index finger	31.6	33.3
Wrist	31.4	33.4
Forearm	30.0	32.0
Upperarm	32.0	32.0

Course

During this visit in the hospital, his temperature ranged between 95-99.2; his pulse rate between 48-106; and his respirations between 17-28. He was digitalized and was occasionally given morphine and phenobarbital for dyspnea and restlessness. When noticeably edematous or markedly dyspneic, he was given 2 c.c. of Mercupurin in 10 c.c. of distilled water intravenously preceded by enteric coated ammonium chloride grs. XXIISS three times a day for three days. His pulse and respiration slowed with rest and he was discharged with instructions to return to the Out-Patient Department where he was seen every few weeks up to the time of his death except during his two subsequent hospital visits.

Second Admission

Five months later, the patient was again admitted to the hospital. His weight was 147 pounds. He had progressively become more dyspneic even on the slightest exertion, with edema of legs and abdomen. He also had attacks of severe cardiac asthma and complained of severe cramps in legs even on walking across a room. There had been little or no cough. The liver was palpable three finger breadths below the costal margin and there was shifting dullness in both flanks. There was marked pitting edema of both lower extremities, sacrum, face, back, legs, and genitalia. His fluid intake always exceeded his output except when under hospital surveillance or taking mercurial diuretics. A slight improvement was noted after a rest in the hospital of about two weeks where he was treated with ammonium chloride, mercurin suppositories, and digitalis. His electrocardiogram was about the same as before. His

blood showed hemoglobin 98 per cent; red blood cells 5,200,000; white blood cells 8,000; segmented 76 per cent; lymphocytes 22 per cent; monocytes 2 per cent. Urine specific gravity 1.018 to 1.022; albumen 2 plus; sugar negative; microscopic negative. Blood sugar 129; nonprotein nitrogen 42.9; Kahn negative. Temperature between 96.8 to 99; pulse between 48-84; respirations between 16-28. The x-ray showed a definite increase in the size of the heart shadow. The heart measurements were: TD 33.8; LD 20.0; ML 14.3; MR 7.2; GV 5; AV ratio 0.408. There was more atelectasis of the right lower lobe.

Third Admission

He was admitted to the hospital in complete decompensation where he was placed in an oxygen tent. The treatment was of no avail and he died January 26, 1939, five days after admission. The prominent findings on this admission were hemoptysis, prominent neck veins, moist râles throughout the lungs, a smooth and tender liver four finger breadths below the costal margin, and a marked pitting edema of both lower extremities and over sacrum.

Laboratory Findings.—His blood showed hemoglobin 13.5 gms., 92 per cent (Sahli); red blood cells 4,400,000; white blood cells 4,500; stab neutrophiles 2 per cent; segmented 74 per cent; lymphocytes 23 per cent; eosinophiles 1 per cent. Urine examinations showed specific gravity 1.010 to 1.018; albumen trace to 1 plus. Blood sugar 111 mgs.; nonprotein nitrogen 73.2; chlorides 435; total protein 6.48; albumen 3.42; globulin 3.06; albumen-globulin ratio 1.1 to 1; urea 39.0.

Electrocardiogram. (Final)—RAD. Auricular fibrillation not controlled. QRS equals 0.09 seconds. T 1, 4 upright. T 2, 3 inverted and deeper than in previous curve. S-T 2, 3 slightly depressed. S-T 4 elevated.

His temperature increased from 97 to 103 at exitus. His pulse remained at about 116.

Autopsy

Positive Pathological Findings. The body was that of a well-developed, well-nourished, white male, fifty years old with marked edema of lower half of body. The left chest was more prominent than the right. The superior epigastric artery was much enlarged, measuring 1.3 cm. to .5 cm. in diameter from above downward. The liver was small, firm on section with evidence of fibrosis; it weighed 1,300 grams. The abdominal aorta revealed no abnormalities of size or structure.

The right pleural cavity contained 500-700 c.c. of clear yellow fluid, the left 700-1,000 c.c. The intercostal arteries were uniformly enlarged, varying from 0.6 to 1 cm. in diameter. Scalloping of the rib margins in their lower posterior and lateral surfaces was noted. The internal mammary arteries were dilated varying in diameter from .6 cm. above to 1.3 cm. below. A coarctation of the aorta was encountered at the point where the ductus arteriosus (not patent) joined the aorta. The innominate, right and left subclavian and carotid arteries were dilated. The pericardial sac contained 400-500 c.c. of clear yellow fluid. The heart was markedly enlarged in all its chambers; it weighed, with the great vessels, 1,140 grams. The orifices were dilated, but there were no abnormalities of the valves, except slight calcification of the anterior mitral leaf. The circumferences were: mitral 11.8 cm., aortic 9 cm., pulmonic 9 cm., tricuspid 15.3 cm. The coronary vessels were not calcified and were patent. The right and left lungs were heavy with apparent diffuse fibrosis on section. They were crepitant, air-bearing, floated and presented no other gross abnormalities on section. The peritoneal cavity contained 2,500-3,000 c.c. of clear yellow fluid.

1. Coarctation of the aorta.
   (a) Coarctation at a point where the left subclavian and nonpatent ductus arteriosus joined the aorta.
   (b) Marked dilatation of all chambers of the heart.
   (c) Marked hypertrophy of all myocardial tissue.
   (d) Chronic passive congestion of lungs, liver, kidneys, and spleen.
   (e) Old subpleural hemorrhage.
   (f) Dilatation of the subclavian and carotid arteries.
   (g) Dilatation of the internal mammary arteries.
   (h) Dilatation of the superior epigastric artery.
   (i) Dilatation of the intercostal arteries.
   (j) Scalloped lower rib margins.
   (k) Dilatation of the azygos and hemiazygos veins.
2. Hemorrhagic cystic glands.
3. Two small ventral herniæ.
4. Pleural, pericardial and peritoneal effusion.

Microscopically, there was minimal fibrosis of the lungs. The microscopic examination of sections of other organs concurred with the gross findings.

Discussion and Conclusions

The writer presents a case of adult type of coarctation of the aorta, not associated with any other congenital lesion, in a male of fifty years of age who showed right axis deviation in his electrocardiogram and a markedly dilated and hypertrophied right heart. The patient had shown a left ventricular failure as evidenced by his dyspnea and orthopnea since we had first seen him. This would be the primary strain to be expected with coarctation of the aorta and associated arterial hypertension. We tried to account for his chronic cor pulmonale by the fibrosis and atelectasis as reported in x-ray examinations and his history or exposure to iron dust for a period of fifteen years. From our findings at post-mortem, we ruled out mitral stenosis, pulmonic valve stenosis or regurgitation, pulmonary endarteritis, organic tricuspid insufficiency, marked pulmonary fibrosis, or marked pulmonary emphysema. Hence, we concluded that his right ventricular failure with right axis deviation and hypertrophied right heart must have been the natural

sequence from the left ventricular failure. Thompson and White[8] were the first to discuss this commonest cause of hypertrophy of the right ventricle. They showed the sequence of events which produce the right-sided enlargement to be:

1. Weakening and failing of left ventricle.
2. Dilatation of left ventricle with relative stretching of mitral ring and hence regurgitation.
3. Onset of cardiac fatigue.
4. Elevation of pressure in left auricle with distention of lungs.

Thus, "the right ventricle in consequence is compelled to contract against a greater load and then passes through the same phases of cardiac strain as the left."

I am indebted to Dr. Paul D. White for his suggestions and Dr. R. W. McClure for the post-mortem examination and his careful measurements.

Bibliography

1. Abbott, M. E.: Coarctation of the aorta of the adult type, Part II. A statistical study and historical retrospect of 200 recorded cases, with autopsy, of stenosis or obliteration of the descending arch in subjects above the age of two years. Am. Heart Jour., 3:392, 572, 1928.
2. Blackford, L. M.: Coarctation of the aorta. Arch. Int. Med., 41:702, 1928.
3. Bonnet, L. M.: Sur la lésion dite stenose congénitale de l'aorte. Rev. de méd., 23:108, 1903.
4. Flexner, James: Coarctation of the aorta (adult type). Am. Heart Jour., 11:572, 1936.
5. Graybiel, A., Allen, A. W., and White, Paul D.: A histological study of the arterioles of the muscle and skin from the arm and leg in individual with coarctation of the aorta. Jour Clin. Investigation, 14:52, 1935. Abstracted Am. Heart Jour., 10:557, 1935.
6. Hallock, P., and Hebbel, R.: Coarctation of the aorta, nonclinical type, associated with a congenitally biscuspid aortic valve. Am. Heart Jour., 17:444, 1939.
7. Skoda: Foreign hospital reports. Lancet, 2:13, 1871.
8. Thompson, W. P., and White, Paul D.: The commonest cause of hypertrophy of the right ventricle—left ventricular strain and failure. Am. Heart Jour., 12:641, 1936.
9. White, Paul D.: Heart Disease, 2nd edition.

MSMS

WAYNE FACULTY MEMBERS NAME TO STATE GROUPS

Two members of the Wayne University faculty have been reappointed to state boards and commissions by Gov. Murray D. Van Wagoner.

Prof. Orin E. Madison, of the chemistry department in the college of Liberal Arts, was named to a new term on the State Board of Examiners in Basic Sciences, of which Wayne Prof. Warren O. Nelson is also a member. The five-man Board examines those persons seeking state authorization to practice the healing arts.

Dr. Edward J. O'Brien, professor of clinical surgery in the Wayne University College of Medicine, was named to a new term on the Tuberculosis Sanatorium Commission, the nine-man board which administers Michigan's two sanatoriums. He has been president of the Commission for the past twelve years.—*Wayne University Newsletter,* December 3, 1941.

The Physician in National Defense*

By Robert A. Bier, M.D.
Washington, D. C.

ROBERT A. BIER
Major, Medical Corps, National Headquarters, Selective Service System, Washington, D. C.

■ I WISH to tell you how glad I am to be here on behalf of General Hershey, our Director, and Colonel Rowntree, the Chief of the Medical Division at National Headquarters of Selective Service. I am here to express to you their appreciation and that of the Nation for the fine work you are doing as physicians in Selective Service. It can be said in all truthfulness that the task of the physical examination of men in Selective Service is one of the most important and one requiring a great amount of work. The fact that you are doing this as a patriotic duty and without compensation is another great milestone in the illustrious history of American medicine.

No doubt you are, from a professional standpoint, interested in matters concerning the rejection of registrants at the Army induction station, after they have been passed by Selective Service physicians. In some states this ratio has been quite high and in others, relatively low. The high rate of rejections, however, has given us some concern, not only of themselves, but also because of the unfavorable public reaction. We want it distinctly understood by all that the Army and Selective Service are not rivals or working at opposite purposes, but are working together as a team. The purpose of this team is to select those men best fitted for training to become cap-

*Presented at the seventy-sixth annual meeting of the Michigan State Medical Society, Grand Rapids, Michigan, September 17, 1941.

able soldiers in a modern army, with all that it implies.

Army vs. Selective Service

The difference of opinion of the two groups of examiners in the Army and Selective Service may be expressed briefly.

A. On the part of the Selective Service physician:
   1. The desire to fill the call
   2. Unfamiliarity of Regulations and improper interpretation
   3. Sending the registrants to the Army for a decision because of failure to take the responsibility of passing or rejecting them. **(The Regulations require that men be sent to the Medical Advisory Board for a final decision where there is any doubt as to the exact status of the man's condition.)**

B. On the part of the Army examining physician:
   1. A disciplined team of physicians under supervision of a trained medical officer
   2. More familiarity with the Regulations and their interpretation
   3. Training in the procedure of processing men for a particular purpose
   4. Desire of the Army to admit only those unquestionably physically and mentally qualified for training as modern soldiers and who will not become charges of the Government.

To illustrate the physical stamina needed, a soldier must be able to march twenty miles a day with full equipment, and at the end of the march have enough reserve energy and stamina to engage in combat. In spite of the mechanization of some of our forces there is still need for such stamina. It takes physical strength and endurance to ride in or to operate a tank, cross-country car, or reconnaissance car across rough terrain under battle condition. Even with this careful double examination there are some unqualified men who manage to get into the Army and who must, therefore, be discharged, as shown by the following report from the Surgeon General's Office:

> The rate of discharges for physical and mental disability for soldiers procured through the Selective Service System is much lower than the rate of discharges for men entering the Service in any other manner. The rate of discharge for Selective Service men is 5.4 per thousand; National Guard, 16.7 per thousand; Regular Army in peacetime, 19.4 per thousand and Regular Army from recent enlistments, 24.4 per thousand.

From a purely professional standpoint, there is a difference of opinion among physicians which will always give rise to a certain rate of rejections, no matter how well each group may do their work.

There have been instances in which the Army examiners have been overly cautious or have "ridden a hobby" or have even misinterpreted Regulations. In the latter case it was necessary in one instance to call to the attention of the Corps Area Surgeon an incorrect interpretation of Regulations by a certain Army induction station. The fault was corrected and the rate of rejections at that station dropped. We know that in a few instances had more time been given by the physicians in Selective Service to the study of the Regulations and the examination of the registrants, we would have suffered fewer rejections at the Army induction station. In justice to the physician, who in his ordinary practice has little time, this work of Selective Service is an added burden.

I might say that one of the principal errors that physicians make in the Selective Service examination is the attempt to examine men without having them remove all their clothes. To improve the physical examination of Selective Service, we recommend the following:

1. Know and adhere to the Regulations in MR 1-9 as found in Selective Service Regulations, Volume VI.

2. When and wherever possible, examining teams of physicians should be formed to process the registrants. As few as two or three physicians may work together as a team. The team examination makes for a better examination and reduces considerably the time and work required. If possible, these team examinations should be made in hospitals, clinics, or other similar medical institutions. Every effort should be made by local Selective Service officials to obtain such housing for the medical work of Selective Service. Medical schools could offer the facilities of their buildings and the students should assist as clerks, and junior clinicians in the examinations of registrants. Such work as weighing, measuring, and other simple procedures may be done by the senior students in medical schools.

In the District of Columbia, all twenty-five local boards have had their examining physicians in teams housed in five major hospitals since the installation of Selective Service. In addition, students from the three medical schools in Washington assist in those examinations during the school term. This plan has resulted in a low rate of rejections, with practically no turnover of examining physicians, and a high morale among the physicians of Selective Service, and the city as a whole.

A procedure that National Headquarters believes will improve the record of Selective Service at the Army induction station is the more frequent use of the Medical Advisory Board. Here we have available specialists who are, in many instances, men of outstanding ability in the community and in the country. Local board physicians should refer more men to the appropriate specialists on the Medical Advisory Boards. In this way, many registrants may be properly classified in their own local board. By an accurate determination of the man's physical condition by referral to the specialist, much trouble can be saved for the registrant as well as avoiding trouble and expense for Selective Service and the Army. Such action will, of course, reduce the number of rejections at the induction stations and lessen the embarrassment to the physician in his local community. It is advisable for all examining physicians to know their Medical Advisory Board and make use of its full facilities. It has been estimated that at least 5 per cent of registrants should be sent to the Medical Advisory Board. From our observations throughout Selective Service, the Medical Advisory Boards are not used to this extent.

In the early days of Selective Service there was much trouble regarding rejections at induction stations because of teeth. Much of this trouble has been eliminated with the appointment of dentists as dental examiners for each local board. In addition, dental regulations have been liberalized by the use of Medical Circular No. 2 (dental) with which you all should be familiar, whether you are a dentist or a physician. Several conditions which may give rise to difficulties at the Army induction station, and subsequently, if these men are admitted to the Army, are: old fractures with varying degrees of deformity, hernias, flat feet and low back syndromes. Such cases should be examined with particular care by the local board physicians and when there is any doubt whatever as to the exact condition they should be referred to the appropriate Medical Advisory Board member. Flat feet and low back syndromes, while perhaps not particularly disabling, are often a source of complaint by the soldier who does not wish to meet his obligations or who wishes to extricate himself from an unpleasant duty. A very practical Army Medical Officer with twenty-five years of service, the Chief Medical Officer of a large Army induction station, said to me in referring to such a case: "I just know that he won't make a good soldier." Such complainers may be borderline mental cases, as well as being physically handicapped.

The Medical Division of National Headquarters welcomes opportunities such as this to discuss frankly with the physicians of Selective Service the problems as we see them and to gain from you an insight into difficulties that you encounter. Due to the magnitude of the work and the limited time at our disposal, certain difficulties are bound to arise. We at National Headquarters have tried to put ourselves in your place. We are constantly endeavoring to improve ourselves by education in the work of Selective Service, and you can do the same. Local, State and National meetings are encouraged for the purpose of training and the indoctrination of physicians in the medical work of Selective Service. In several states there have been local meetings of Selective Service physicians for the discussion of general and specific problems. Large regional seminars in psychiatry have been held throughout the country. One state in the East, in which the medical work is on a high plane, has a semi-official, part social and part professional organization called Physicians in Selective Service. They have regional meetings which are not only to the betterment of Selective Service but bring together these physicians to their mutual professional and social benefit. We must all work for the common good.

Lessons from World War

One of the lessons learned from the World War was the importance of keeping out of the Service men who are mentally unfit for military service or who are absolutely psychopathic. Men who are mentally unsuited for the armed forces

are a source of trouble and expense while in the Army and may later become charges of the Government, for the rest of their lives. The Veterans Administration estimates that it is costing the citizens of this country approximately $30,000 for each psychopathic case accepted into the Army during 1917-18. Even now, this early in our national effort, we are hearing of the Army's problem in the matter of mental cases inducted to date. Colonel Porter, an outstanding psychiatrist of the nation and the Chief of the Neuro-Psychiatric Service at the Army Medical Center in Washington, states, in a recent newspaper interview, that the care of mental cases in the Army as the result of the present expansion of the armed forces is becoming a very serious problem. These cases already are taxing the bed capacity of the military hospitals and are freezing these facilities, rendering them unavailable for other more urgent purposes, as in the event of disease epidemics or war casualties; yet, we are only at the beginning of our procurement program for a large armed force. The selection out of registrants mentally unsuited for the military services is one of the most important single problems of Selective Service.

Mental Examination Problems

Every effort should be made to accomplish this end. Large regional seminars were held throughout the country. These should be augmented by State, county and local seminars to impress upon the physicians and others in Selective Service, not only the importance of selecting out these men, but all the methods available for detecting them. This may be accomplished by rejecting those men known to the community as queer, social misfits, the town ne'er-do-wells, and others. The liberal study of Medical Circular No. 1 (revised) will be of tremendous value, not only to psychiatrists, but to local board physicians as well, in detecting and classifying these patients. Here again, the use of the Medical Advisory Board psychiatrist should be utilized in each and every case in which the local board physician has the slightest suspicion that a registrant is not entirely normal.

A procedure is recommended that is in use in several states with spectacular success. This is the use of social service exchanges or other agencies who record a man's commitment or treatment in any mental institution. In the several states which keep such a record, the names of all men in Class I are sent to this central clearing point. Any man whose name is found in this file as having been treated at an institution for mental and nervous disorders is sent to the local board. In order to keep within the law as to the confidential nature of the exact condition for which the man was treated, no diagnosis is given. The mere fact that a man has been treated in an institution is sufficient reason for keeping him out of the Army. This may seem severe or unreasonable to some, but experience has shown that those patients do not make good soldiers and in all probability will break down and become full-blown mental cases with all that it implies. Therefore, I cannot urge upon you too strongly the necessity of keeping out of the Army, not only all those who are mental cases, but also all those who are temperamentally unsuited to military life with its severe training, discipline, and necessary social adjustment. Try to make it clear to the public that these men rejected are not mental cases or necessarily "crazy" or "mad" (to use newspaper vernacular) but they are merely temperamentally unsuited to this occupation just as an energetic, brilliant professional man would not do well in an industrial plant as a machine operator doing a monotonous simple task day in and day out. There is absolutely no stigma attached to this man if classified as temperamentally unsuited to such work.

Thoroughness Needed

In certain industries the by-product has at times become as important, or more so, than the original product for which the industry was established. This is the situation in Selective Service as regards the statistical study of the records of Form 200. (Report of Physical Examination.)

At the present time the chief function of the medical work of Selective Service is to properly examine men for presentation to the armed forces.

You have been asked to examine, thoroughly, each and every man sent you and to complete Form 200. The chief reason for the completion of the examination is so that every man may be properly classified as to his true physical condition. It may be necessary in the future to call for limited service, certain of these men with

minor defects. If a physical examination is stopped when the first disqualifying defect is found, we will not know if the man has any other disability which will render him incapable of any military duty: for example, a man with an insufficient number of teeth may be classified I-B and carried on the records as available for limited military service, when, in reality he may have a heart condition which would render him unsuitable for any military service; therefore, all men should be classified on their principal disability and all other disabilities or defects noted. When there is need for limited service men these registrants who have been classified on a partial examination will have to be called again and given a thorough examination. By completing the physical examination the first time much work will be saved the physician and Selective Service, and a proper classification of the men will be obtained.

The statistical study of the defects in these men will assume greater and greater importance as time passes. Already from the meager reports, we have learned with some chagrin that our manhood presents a large number of physical imperfections. As the work progresses and these studies are furthered, we shall be able with some degree of accuracy to determine the percentage and numbers of these defects and how they are distributed as to age, race, occupation, geographic situation and perhaps their social and economic status. The information is taken from the duplicate form 200 sent to National Headquarters by your local boards through State Headquarters.

In addition to making a complete examination, Form 200 should be properly and completely filled out. In filling out this form, care should be taken to state as accurately as possible the results of your examination in a proper scientific and professional manner. Obviously such diagnoses as "eyes can't see to do no good," and "bad heart," "crippled since birth," "dogs flat," "mouth terrible," "impossible teeth," etc., do not reflect credit upon the examiner and make it exceedingly difficult to properly classify such defects.

The Statistical Division at National Headquarters has established a nomenclature of diseases and conditions for coding defects found on Form 200. This nomenclature may be published for distribution throughout Selective Service, for your information. In the meanwhile, you are urged to use any standard nomenclature of disease and injuries in recording the results of your physical examination. Those of you who work in hospitals approved by the American Hospital Association are familiar with the rigid requirements of that organization in recording your clinical findings and describing your operations.

Analysis of the Unfit

Now that we have considered the major medical problems of Selective Service as regards the actual procurement of men for the Army, let us look at the situation from a broader view. I refer to the present status of National Health as revealed by the analysis of Selective Service examination. As mentioned previously, the large per cent of men unfit for military service among the 21-36 age group has come somewhat as a surprise and as a disappointment. This Nation, almost above all others, enjoys more prosperity, better standards of living and better medical care than any other nation; yet it is a matter of great concern, not only to the medical profession, but to the whole country, that we appear so deficient in health. It is a well known fact that one of the reasons for lowering the age in Selective Service to 28 years was due to the very high proportion of physical defects in men in older age groups. The number of men rejected in these higher age groups was larger than those accepted as physically fit for general military service. If this state of affairs exists among males of the Selective Service age group, it is reasonable to expect this to be an index to the health of the rest of the Nation, that is, the women and children, and those males below 21 and above 36.

This condition of the health of our manhood as indicated by Selective Service present a challenge to the medical profession of this country. The problem is not only what to do about the defects as found in the registrants in Selective Service, but what to do about the health of the whole Nation, in the present and in the future. The medical profession, with the coöperation of all available interested agencies, should institute a program of: first, education of the public to the need and importance of better health, and, second, how it may be procured.

Rehabilitation

The first step in this program is that of prehabilitation. Prehabilitation is a word coined at National Headquarters, in which the registrant, before he is called up for physical examination by Selective Service, secures a physical examination according to the Standards of the Selective Service requirements. If it is found that he has certain remediable defects which may prevent his entrance into the service he secures a correction of these defects in order to be acceptable to the armed forces. This plan implies the patriotic effort of a registrant to prepare himself for service to his country.

Rehabilitation of the rejected registrant with remediable defects is another important step in the program. The correction of these defects in registrants not only will provide more men for national need, but will be of great value to the registrant himself. After the rehabilitation of the registrant with remediable defects comes the consideration of the men rejected for more serious defects—those classified IV-F. Many of these men may not be able to have their defects remedied to enable them to be acceptable to the Army, but it may be possible to have their condition improved or arrested so as to make them an economic asset rather than a liability. A great many defects or diseases discovered at the Selective Service examination may be found in time to make a considerable difference in a man's life expectancy if attended to properly.

In addition to the present problem as to the defects found, we must consider ways to prevent them. The highest causes for rejection are found in teeth, eyes, and musculoskeletal defects. Some study should be made as to the causes of these conditions with a view to correcting them.

In one of the large midwestern universities, through the influence of the Dean of the Medical School, a plan was instituted for the correction or improvement of defects found among the male students of Selective Service age. These students were examined in accordance with the physical standards for Selective Service and were classified I-A, I-B, or IV-F, accordingly. This is a plan that might well be adopted by all colleges and universities, not only among the men, but the women as well. Certainly in a worthwhile endeavor toward a better national health, the institutions of learning can and should lead the way.

This is a gigantic program and all available forces at our command will be needed to accomplish it. If Selective Service does no more good than to focus our attention on the present trend of national health, it will be well worth all that it costs our Nation.

Medical Personnel

A situation of which most of us were aware, but which has become accentuated by the present emergency, is the supply and demand of physicians for civilian needs and National Defense. It is a well known fact that there are too many physicians in urban areas, and not enough in rural areas. This is partly the fault of the physician and partly the fault of the public. A young physician receives his education and training in the large metropolitan areas and tends to settle there, rather than return to the locality from which he came. In the rural areas there are many localities which will not adequately support a physician in the manner to which he is entitled after his long years of study and sacrifice. How this problem may be solved is not an easy one but is one that should be given earnest consideration in the plans for an adequate program for our Nation, not only for the present, but for the future as well.

The Surgeon General of the Army has stressed the need for more and more officers to supply the demands of our new Army. To offset the shortage of physicians by younger men being called to service, the following suggestions are offered: More women should be encouraged to study medicine, and those women not in active practice should be encouraged to return to active medical work to assist during this period of emergency. Older staff members of hospitals will have to do the work formerly performed by their juniors and assistants. Men who have retired or are about to do so should return or continue in private practice if possible. Every effort should be made to conserve the limited medical manpower now available in the country. It behooves us all to work a little harder, sacrifice a little more, and bend our efforts to the fullest capacity, to the end that our country will be better served.

The Dangers in Breech Delivery*

Ward F. Seeley, M.D., and R. S. Siddall, M.D.
Detroit, Michigan

WARD F. SEELEY, M.D.
A.B., University of Michigan, 1909. M.D., University of Michigan Medical School, 1911. Fellow, American College of Surgeons. Diplomate, American Board of Obstetrics and Gynecology. Member: American Association of Obstetricians, Gynecologists and Abdominal Surgeons; Central Association of Obstetricians and Gynecologists; Michigan Society of Obstetricians and Gynecologists, Michigan State Medical Society. Chief, Obstetrical Division Herman Kiefer Hospital. Attending Obstetrician and Gynecologist, Harper and Receiving Hospitals. Professor and Chairman of the Division of Obstetrics and Gynecology at Wayne University College of Medicine.

ROGER S. SIDDALL, M.D.
A.B., University of North Carolina, 1916. M.D., Johns Hopkins University, 1920. Diplomate, American Board of Obstetrics and Gynecology. Assistant Professor of Clinical Obstetrics and Gynecology, Wayne University College of Medicine. On the staffs of Harper Hospital, Herman Kiefer Hospital, and Highland Park General Hospital. Member: Michigan State Medical Society; Michigan Society of Obstetricians and Gynecologists; Central Association of Obstetricians and Gynecologists.

■ IT IS generally acknowledged that breech presentations, while having little effect on maternal results, present definitely greater infant dangers than do vertex presentations. The increased risk is largely due to (1) the fact that complete birth of the child must occur within a few minutes after the stage of expulsion up to the level of the umbilicus, or there is apt to be compression of the umbilical cord between the head and the birth-canal with resulting fetal asphyxia; and (2) birth injury from efforts on the part of the obstetrician to overcome dangerous delay in delivery. There are other hazards also, and it seemed to us that some of these dangers, the true significance of the factors related to them, and their management were still obscure. In an effort to obtain further information, as a basis for more successful treatment, we reviewed the important recent literature along with the study of a large series of breech cases from Harper Hospital and Herman Kiefer Hospital.

Incidence and Etiology of Breech Presentation

The incidence of breech is given as 2.1 per cent (Kushner) up to 6.32 per cent (Santomauro). At our hospitals the figures were 4.8 per cent at Harper and 6.3 per cent at Herman Kiefer, the latter having many emergency admissions. We could determine no statistically discernable cause for breech presentation, other than the recognized one of premature labor. Contrary to usual statements, obstacles to engagement of the presenting part seemingly have little or no effect. For example, among our full term cases, contracted pelvis occurred in 2.9 per cent—actually a rather low incidence. Apparently, other commonly stated causes, such as placenta previa and toxemia of pregnancy, are of importance simply as causes of premature delivery.

Fetal Mortality

Essential to our study was a determination of the mortality which could be ascribed to breech presentation. There seems to be confusion on this point, the published gross mortality rates varying from 11.5 (Beni) to 35.3 per cent (Mohler). In our 773 cases there were 244 stillbirths and neonatal deaths, making a gross mortality rate of 31.6 per cent. The vast majority of these deaths, however, occurred among the very immature, or else the babies were dead on admission or had serious developmental anomalies. In other words, much of the gross mortality associated with breech is not ascribable to the presentation but rather to the inclusion of an unusual number of babies who would have little or no chance of survival under any circumstances. Consequently, in order to obtain a truer picture, we excluded babies weighing less than 3 pounds 4 ounces or 1500 grams, and those already dead on admission or with anomalies incompatible with life. We found eight reports permitting an estimation of the stillbirth and neonatal mortality on this basis. The lowest was 5.38 per cent (Nevinny—in only 130 cases) and the highest 22.7 (Danforth and Galloway). For the 538 such cases at our hospitals the figure was 9.9 per cent.

Since breech presentation is considered especially dangerous for the immature fetus, the high mortalities noted above might be due in great part to the inclusion of premature with the full term babies. To clarify the point, we accepted, in the absence of better criteria, the usual arbitrary standard of a birth weight of 2,500 grams (5 pounds 8 ounces), or over, as indicating full

*From Harper and Herman Kiefer Hospitals, and the Division of Obstetrics and Gynecology, Wayne University. Read before the Section on Obstetrics and Gynecology, Michigan State Medical Society, September 19, 1941.

term development. The reports seen by us, in which at least 200 cases were involved and where calculations were made on this basis, gave mortalities ranging from 8.5 (Cannell and Dodek) to 12.8 per cent (Gordon, Garlick and Oginz). At our hospitals the 449 breech babies in this group had a death rate of 6.5 per cent. These rather high mortality rates for the very favorable term babies (as well as the previously mentioned excessive combined premature-term, and the gross figures) give incontestable evidence of increased risk associated with breech presentation. As further evidence, we compared the term breech group at our hospitals with an entire four year series of full term babies and found the breech mortality to be 6.5 per cent, as noted before, and for all presentations 1.9 per cent.

Factors in Fetal Mortality

If we grant, then, that breech presentation is associated with an inevitably graver fetal risk, it becomes important to determine and examine the factors concerned in the greater mortality. This would be at least a step toward better management of these cases.

Skill in Delivery.—Perhaps the most emphasized factor in fetal mortality is the technique of manual aid or breech extraction. A few authors even deny the inevitably greater risk to the breech child on the grounds that skill in delivery will compensate for the dangers of the presentation. We are agreed that expertness will greatly improve results, but we are also convinced that the inherent dangers in breech presentation cannot be entirely eliminated by any degree of skill in delivery. The various techniques for breech delivery are described in all textbooks and need not be repeated. Of more interest, we believe, would be a consideration of the less known factors in breech mortality.

Prolapse of the Umbilical Cord.—The higher frequency of prolapse of the umbilical cord in breech presentation than in vertex is no doubt in great part due to the imperfect fit of the smaller and irregular breech into the birth canal. Nine reports gave incidences varying from 0.9 (Westman) to 11.9 per cent (Sherman), with an average for all cases of 2.9 per cent. In our cases the occurrence was 3.3 per cent, which is about six times the usually accepted 0.5 per cent for vertex. The gravity of this increase is indicated by the high fetal mortality variously reported at 25 to 50 per cent. Among our eighteen cases with the complication, 6 or 33.3 per cent of the babies were lost. So definite is the danger that Studdiford and Sherman advised vaginal examination on rupture of the membranes so as to permit early discovery and prompt treatment.

Premature Separation of the Placenta.—As a factor in breech fetal mortality, we found frequent mention of premature separation of the placenta, which theoretically might occur from retraction of the uterus after partial expulsion of the child. However, there was apparently no such instance in our series, and in the literature we found no statistical evidence of unusual occurrence in breech.

Contracted Pelvis.—There is as yet no technique for accurate comparison of the size of the breech baby's head (situated in the fundus) with that of the pelvis. Even x-ray cephalometry offers many technical difficulties. In contracted pelvis, then, disproportion between the size of the head and that of the pelvis could well escape discovery until late in labor, when the resulting delay in descent would greatly endanger the child. The seriousness of the danger is indicated by Cavagnino's 26 cases with 6 deaths, and by the 31.7 per cent fetal loss in primiparas and 32.6 in multiparas reported by Gordon, Garlick and Oginz. In marked contrast, there were no deaths in our thirteen full term breeches with contracted pelvis. This exceptional result is probably explained, however, by the fact that 6 or nearly one-half were delivered by cesarean section. Presumably, the operation was employed whenever any possibility of disproportion was suspected. Such treatment would seem justifiable from the standpoint of the child alone, but may be debatable when the interests of the mother are also considered.

Frank Breech.—**Because of more frequent difficulties in actual delivery, it is often said that frank breech has an especially high mortality. A few authors, notably Morton, deny this. Of the 538 cases with viable babies at our two hospitals, there were 298, or 55.4 per cent frank breeches, an incidence approximating Moglia's 54.2 per cent. The results for**

frank and other varieties of breech, as well as for the divisions of these groups according to parity and their further subdivisions into those with premature or full term babies, showed without exception lower mortalities for frank breech.

Prolonged Labor.—The common belief that breech labor is more apt to be prolonged, with consequent adverse effect on the fetus, finds no confirmation in the recent literature. Gateaux gives the average length of labor for multiparas as 10 hours 25 minutes, and Meyer 12.3 hours; while for first labors Morton, Kushner, and Meyer report 16 hours 41 minutes, 17.7 hours, and 17.5 hours, figures well within the generally accepted averages.

Premature Rupture of the Membranes.—Early rupture of the membranes occurs in a high proportion of breech cases—according to Gateaux in 26.1 and Westman 32.8 per cent. There is, however, little evidence of definite influence on fetal mortality, other than a related increase in prolapsed umbilical cord. An incidental finding of some interest was the same apparent accelerating effect on breech labors, as has been shown for vertex presentations.

Parity.—Anticipating convincing data to indicate a higher fetal mortality in first labors, we were surprised to find that four of the twelve reports consulted, as well as our series, showed just the reverse; and a fifth gave identical results for primiparas and multiparas. An explanation for this in our cases and Beni's (the only other series giving separate results for premature and term babies) was the excessive mortality for prematures in multiparas. Full term results (obtainable from our series, Beni's, Santomauro's, and that of Gordon, Garlick and Oginz) showed without exception a higher fetal mortality in first labors.

Age of Primiparas.—Beruti reported an increasing fetal risk in primiparas with advancing age and stated that in those over age 30 the fetal loss was deplorable. Three other studies which gave adequate data (Westman, Cannell and Dodek, and that of Gordon, Garlick and Oginz) confirmed the statement in great part. In our series the primiparas of thirty years and over had a full term fetal mortality of 13.3 per cent, as compared to only 6.8 per cent in the younger women. In the age group of thirty-five years and over the fetal loss is still greater, being reported as 20 to 35 per cent.

Birth Weight.—Very small babies in all presentations have a high death rate, and this is further increased in breech. Less known is the increased risk for large babies. Mohler's mortalities of 50 per cent in primiparas and 26.1 per cent in multiparas for babies weighing 8 pounds or over gives an exaggerated picture, no doubt; but in every instance the reports offering data on this point showed a greatly increased risk for babies over medium weight. The mortalities according to birth weight as found in our series are illustrative, as follows: 6 pounds to 6 pounds 15 ounces—4.4 per cent; 7 pounds to 7 pounds 15 ounces—2.5 per cent; 8 pounds to 8 pounds 15 ounces—11.3 per cent; and 9 pounds and over —20 per cent. Differences were more marked in first labors but were also of considerable clinical importance in multiparas. An obvious restriction on the use of this information is the impossibility of accurately gauging the weight of the unborn fetus, though the usually possible estimate of small, medium, or large size should be sufficient in most cases.

Prophylactic External Version.—The most potent factor in the moderation of breech fetal mortality, in our opinion, is the greatly neglected prophylactic turning of the inevitably dangerous breech presentation to the safer vertex. Granting some possibility of entanglement of the umbilical cord or detachment of the placenta, the actual incidence of such accidents, according to all available evidence, is so low as to be almost negligible. This being the case, and considering the reduction in fetal risk, a trial of the procedure is most worth while, even though it is recognized that there are some failures and recurrences. The technique is well known and requires no repetition.

Conclusions

There is an inevitably greater fetal risk associated with breech presentation. For example, in our series from two Detroit hospitals the breech mortality was more than three times that for all presentations. Since the greater part of breech mortality occurs in the expulsive stage of

labor, skill in actual delivery is essential and can greatly modify fetal loss, but, on the other hand, cannot be expected to eliminate all danger. An examination of less known factors, which could be responsible for the increased danger, showed that premature separation of the placenta, frank breech, prolonged labor, and premature rupture of the membranes were probably of little or no consequence. Prolapse of the umbilical cord, however, with its high fetal mortality is six times as frequent in breech as in vertex. The breech risk for full term babies is definitely increased in both primiparas and multiparas, but the increase is much greater in first labors. For premature babies our investigations indicated an unexplained reversal of this parity relationship. Breech delivery by the vaginal route in elderly primiparas, or when the baby is large, or when there is contracted pelvis results in such a high mortality that consideration for the fetal interests may justify cesarean section in some instances. And, last of all, we wish to emphasize that all the additional risks due to breech presentation can be eliminated in the majority of cases by the usually simple and reasonably safe procedure of prophylactic external version to vertex.

AUTHORS' NOTE: Much of the material here appeared in an article published in New International Clinics, 1:28, 1940, New Series 3, but the text and arrangement are new. The addition of new data has resulted in some modification of the conclusions in several respects.

References

1. Beni, V.: Rilievi clinico-statistici sulla nati-mortalita nel parto per il podice nella Clinica di Pisa e sonseguenti insegnamenti terapeutici. Ann. di ostet. e ginec., 57:1599, 1935.
2. Beruti, J. A.: El Parto pelviano en las primiparas añosas. Semana med., 1:1689, 1935.
3. Cannell, W. E., and Dodek, S. M.: Primary breech presentations. Am. Jour. Obst. and Gynec., 27:517, 1934.
4. Cavagnino, L. Studio clinico sul parto podalico. Ginecologia, 3:559, 1937.
5. Danforth, W. C., and Galloway, C. E.: A study of 285 breech deliveries. Am. Jour. Obst. and Gynec., 35:123, 1938.
6. Gateaux, F.: Les présentations du siège. Gynécologie, 28: 139, 1929.
7. C. A. Gordon, Garlick, R., and Oginz, P.: An analysis of 3,301 breech deliveries. Am. Jour. Obst. and Gynec., 28:140, 1934.
8. Kushner, J. I.: Breech presentation. Med Jour. and Rec., 138:165, 1933.
9. Meyer, H.: Breech presentation. South. Med. Jour., 31:173, 1938.
10. Moglia, G.: Rilievi clinico-statistici sul parto podalico in varietà natiche. Ann. di ostet. e ginec., 53:1839, 1931.
11. Mohler, R. W.: Breech presentations. Report of 170 cases. Am. Jour. Obst. and Gynec., 23:61, 1932.
12. Mohler, R. W.: The management of breech deliveries. Am. Jour. Obst. and Gynec., 36:400, 1938.
13. Morton, D. G.: Fetal mortality and breech presentation. Am. Jour. Obst. and Gynec., 24:853, 1932.
14. Nevinny, H.: Über die Lietung der Beckendlagengeburten. Zentralbl. f. Gynäk., 59:2162, 1935.
15. Santomauro, U.: Natimortalità nel parto podalico. Ginecologia., 2:323, 1936.
16. Sherman, J. T.: Breech delivery. Bull. Lying-in Hosp., New York, 13:344, 1932.
17. Studdiford, W. E.: Breech presentations and their delivery. Jour. A.M.A., 99:1820, 1932.
18. Westman, A.: Über die Steisgeburten. Acta obst. et gynec. Scandinav., 11:112, 1931.

A Psychiatrist Looks at Education

By Louis Adrian Schwartz, M.D.
Detroit, Michigan

LOUIS ADRIAN SCHWARTZ, M.D.
B.S., University of Michigan, 1924. M.D., University of Michigan Medical School, 1926. Attending Physician Harper and Woman's Hospitals, Detroit. Lecturer in psychiatry, Wayne University College of Medicine. Diplomate of National Board of Medical Examiners, 1927. Certified by American Board of Neurology and Psychiatry, 1940. Fellow of American Psychiatric and American Orthopsychiatric Associations. Member of American Psychoanalytic Society, American Association for the Advancement of Science, American Academy of Social and Political Science, National Research Council, Michigan State Medical Society, Advisory Board, Anderson School, Staatsburg-on-Hudson, and Sherwood School, Bloomfield Hills.

■ IF WE are to understand some of the bewildering problems confronting American youth today and the requirements for his educational development, we cannot ignore the effect of the present international crisis as it impinges, directly or indirectly, upon each individual. The social, economic and political problems of the past two decades have had far-reaching effects upon youth and family life, both materially and intellectually. Today youth is further faced with the actual danger of United States involvement in war. He must answer the question of his own philosophical attitude toward such an eventuality and consider his possible participation in it. For the past twenty years, educators and others have directed their energies to exposing the horrors of war and its futility as a means of settling disputes between nations. American youth learned that lesson, only to discover that while we had been preparing our minds for peace, the dictators had been preparing for war.

Education of American youth must now concern itself with the serious task of diligently preserving that democracy which was attained by our forebears. The safeguarding of democracy requires, first of all, an understanding of American social institutions and, second, a wider insight into the social and cultural development of other peoples. Thus may unity and loyalty to the democratic ideal be crystallized by the added appreciation of the other fellow's problems. Youth must understand something of the life behind economic and social development. But it will not be enough to recite the catalogues of economic,

industrial and political changes if we do not go further and inquire what they imply in the lives of people. Youth must gain an appreciation of human values, must come to understand how others feel and learn to live harmoniously together. It is in a new orientation toward these disturbing socio-economic and political questions that hope lies for the enrichment of life and the fuller development of youth for his adult responsibilities.

With the passing of the geographical frontiers which successfully utilized the ambitions and the exploiting, acquisitive instincts of men has come much limitation of economic opportunity. This in turn has imposed greater demands on the individual in his harrassed interpersonal relationships. Gratification of materialistic desires has been lessened in many ways, especially for youth. This may be stated despite the fact that many have access to such modern conveniences as living in a multiple dwelling, buying previously cooked foods, sending out the laundry, using gas and electricity, and traveling by rapid transport. It is frequently suggested that such advantages have so hampered the resourcefulness of individuals that they could not cope with the complexities of life without them. It is true that technical changes in industry and business, the growing size of establishments, the use of power machinery, the operation of chain stores and other conditions of contemporary industrial development have all revolutionized the character of our social life. The material aspects of these changes are relatively easily accepted. But if one pauses to reflect upon one's own experience, the realization dawns that such adaptation has not been accomplished without great concomitant difficulty. We are prone to forget that while the material culture of a civilization is readily changed, the intangible, non-material culture of customs, traditions, codes of behavior, ethics, morals and folk-ways is less plastic. Long after new material values have changed the patterns of conduct which governed man's behavior in a former material culture, confusion, dismay and distrust are produced as man struggles to reconcile the old with the new.

What may be some of the results of this changing socio-economic life for the individual? The most direct effect can be seen in the matter of earning a living. At the outset, it is well to remind ourselves that today it is largely a question of *earning* a living while, a few generations ago, it was a question literally of *making* a living. In earlier days the individual was, for the most part, engaged in agriculture or in handicrafts, in which strength, skill, patience and endurance played a large part. The family was the industrial and economic unit. A young man had before him the example of his father or neighbor. Similarly, a young woman had her mother as guide and teacher. Today, the situation is too frequently different. Youth is faced with uncertainty and anxiety. For the majority there are no longer safe and comfortable havens of traditional occupation and ways of life. Individual helplessness is an outstanding characteristic of these conditions. Whatever the individual's capacity and skill, his employment is subject to abrupt terminations or limitations by business depressions. When times are good, he is subject to the loss of his job through technical changes which render his work obsolete, or he is worn out at forty. These large and intangible factors, creating the worker's helplessness, are reinforced by the more direct limitations upon his activity. Mass production and its attendant control of wages, hours and output by trade unions and other necessary forms of collective bargaining, have deprived the individual of any but an indirect participation in determining his earnings. Modern youth finds personal enterprise stifled by forms of productive and distributive activities. The professions are overcrowded. With the growth of the child labor laws and compulsory school attendance, the age for beginning to earn an income has been progressively postponed. While the individual has been rendered helpless in the matter of earning a living, he has also been progressively relieved of the claims upon him for immediate or future contingencies. There are widows' pensions, old age pensions, social insurances, family welfare societies and other necessary provisions which reflect the helplessness of the individual to make provision for the future. In all of this, we see a transfer of home functioning to wider social organization.

How may education of youth help to meet this situation? Young people should be permit-

ted to share, in so far as their developing capacities permit, in the discussion and the solution of the issues that confront society. Discussion groups in subjects dealing with human relations, social psychology and social science should be vital parts of the education of youth. Through such means a growing knowledge of interpersonal relations can be developed, bringing to the students the contributions of medicine, psychology and social case work as they relate to the factors underlying success or failure, happiness or unhappiness in life.

Youth must also be impressed with the fact that the privileges of citizenship bring responsibilities. Comprehension of the issues confronting our government, awareness of the dictators' threat to democratic principles, and active participation in the concrete tasks of social amelioration which are demanding attention—these are the ideals of intelligent citizenship which should be stressed at all stages of the educative process. We ought not to rely on the slipshod enlightenment of the newspaper columns or on haphazard bits of knowledge acquired through movies and radio. Youth must be moved to interest in the meaning of true Americanism, particularly since so many spurious brands are being peddled today. Youth must learn that propaganda should be scrutinized. Youth should become concerned with social issues, the judicious use of the ballot and participation in the responsibilities of government through a growing knowledge of the aims of our legally constituted representatives. Youth should become aroused to the menace of subversive movements and "isms" that carry within them the germs of intolerance, racial hatred and prejudice, before they assume formidable proportions. Youth must be immunized against the pitfalls of "ism" distortions and irrationality, through the development of an emotionally stable, coördinated and integrated personality which, in turn, has been molded by contact with educators who are effective, mature, wholesome individuals. The personality of the student is directly influenced by the personalities of the adults with whom he has been in contact. There is much in the American heritage that is being abused, and a great deal more may be perverted as the world chaos reaches an intensely critical stage. While the democratic process still prevails, youth should learn how to exercise his rights and fulfill his obligations as an integral part of the vast citizenry of our country.

A proper perspective of education for American youth would necessarily include an understanding of interpersonal relationships, learning how to live with one's fellow men. Prejudice is most frequently due to ignorance and lack of knowledge. Education should be concerned with the development of a feeling of relatedness of the inner self to the outside world. This sense of relatedness is implied in the broad religious and spiritual qualities or cultural attachments. We are not living in normal times; therefore, we cannot any longer afford a slow infiltration of knowledge from the educated few to the illiterate many. *All* of our young people must be morally armed for these trying times, against the inner confusion and spiritual collapse which the growing tides of reaction bring in their wake. If democracy is to survive, there must be prevalent an intelligent social altruism. In the field of morals, from the educational standpoint, the student's *attitude toward* his responsibilities is much more important than his intellectual equipment for those responsibilities. If the job of education means preparation of an individual for life, it necessarily implies development towards this nebulous goal of maturity, of becoming altruistic in the social sense. This carries with it the development of a high degree of personal discipline. The major difference between a child and a mature adult rests on this capacity to renunciate individual prerogatives for a higher altruism. There are imposed upon the individual self-disciplinary limitations which are necessary if people are to live harmoniously together.

Education in America today must reach out to thousands of bewildered young people who are attached by only tenuous threads to but little historical tradition, which will break down the sooner when the storm of unrest becomes more disturbing. Youth has found that while mankind has made solid advances in the conquest of nature, there has been no corresponding progress in the regulation of human affairs. Youth is asking whether the fragment of advance that has been made by our culture is worth defending. Loyalty and sympathy for the American culture must be developed through communal as well as through individualistic enterprises.

In this way, democracy can be safeguarded because it implies a greater, more actively participating experience, rather than taking this heritage for granted. In this way, sectarianism and factionalism, which stand as insurmountable obstacles to any effort toward unity, may be dealt with. Religion, in its broader aspects, still has its progressive rôle to play in the scene of human affairs. There are definite survival values for people in its assets and its spirit has not yet outlived its usefulness. Recognition of the permanency and pragmatic significance of religion will grow upon young people if we will but make an effort to awaken them to this realization and if we, on the other hand, cease to be schismatic in our religious behavior. Another approach is the inculcation and encouragement of the aesthetic qualities of the higher creative capacities of the mind, expressed in the arts, in literature and in the sciences. With the increasing burden of sacrifice imposed on young people, they must develop compensatory satisfactions for these deprivations. The fulfillment that can come through the creative capacities or participation of an individual in social altruism consists in his sharing in the emotional understanding of others, thereby making his own individual problems seem less insurmountable.

Another important provision in this long-time view of education for youth today is training in logical thinking. This implies understanding of cause and effect relationships, ability to reason out one's own problems and to profit by experience. It implies furthermore the development of a strong foundation of good learning habits. The training of youth in logical thinking and good learning habits implies a broad program of education in the social sciences as well as the physical sciences. Moreover, it utilizes the individual's capacities by vocational guidance. A broad study of the redistribution of occupations due to unemployment, the crowding of the professions, seasonal occupations, and other socio-economic factors is essential. In these problems youth has a vital stake and a heroic rôle to play in the future. Much of the maladjustment of youth can be traced to the aimlessness that has characterized his education. We must recognize the fact that the enrichment of the personality through an intensive educative program acts as a stabilizing force during the most crucial period of physical and mental development. The vocational difficulties loom as the foremost and the most perplexing, as a result of unemployment, insecurity, anxiety about the war, the increasingly high level of educational standards in many fields, decreasing demand for skill in routine jobs, and the general condition of economic strangulation. Opportunities for marriage and home life are unfortunately precarious for young people today. Our interest should be drawn to the startling announcement that our country has the largest amount of crime in the world and that the age peak of criminal activities centers around the twenty to twenty-four year period. It is under such disturbing conditions that youth becomes disillusioned with American ideals. Greater fear and emotional unrest are produced as he finds an outlet in movements that stress the "retreat from reason" as the only possible solution for the dilemmas of the day. Economic and social realities cannot be glossed over at a time when there is a grim realization that in them lie the very sources of our distress. To persist in doing so is but to drive young people toward those destructive agencies which promise to meet their demands.

It may be that with the defective social organization men have become embittered, revengeful and unapproachable. Is it possible that new generations, brought up more kindly and taught to have a respect for reason, will experience the benefits of culture early in life and have a different attitude toward it? Will they feel it to be their very own possession and be ready, on its account, to make the sacrifices in labor and in instinctual renunciation that are necessary for its preservation? No culture has yet discovered the plan that will influence all men in such a way, from childhood on. It may be asked where we are to obtain the numbers of superior, dependable and disinterested leaders, who are to act as educators of the future generation. One cannot deny the grandeur of this project and its significance for the future of human culture. Its necessity is securely based on the fact that man is equipped with the most varied instinctual predispositions, whose ultimate course is determined by the experience of early childhood. A certain percentage of mankind, owing

to morbid predisposition, or to too great instinctual vigor, will always remain asocial. For the majority, however, we should not allow ourselves to be discouraged, for when a person has reached a crisis and has mobilized his best energies, he is better able to effect those measures which bring about changes for the better.

If we view the past, we find that within a very short span of years much has been accomplished in developing American ideals and institutions. Perhaps it may be that through this very arduous and threatening situation a newer crystallization of meaning, a finer tempering of these institutions can take place. It is up to young people everywhere to assume their share of this responsibility. The fight can be glorious, and youth must take courage and have perseverance to obtain these objectives. It is upon their shoulders that this task particularly rests, and they should be ever watchful in the protection of those democratic ideals which required so much sacrifice for their attainment. Bloodshed may be unnecessary for their preservation if everyone keeps a stout heart and a deep conviction of the integral part that each can play. Kingsley Davis has aptly stated in his "Youth in the Depression"* that—

"Wherever we look in this perturbed world, no matter in what country, or under what flag, youth is stirring. The new generation has become self-conscious, conscious that it has problems and that these problems are a part of world problems. Youth is stirring more actively and thinking harder in some countries than in others, but everywhere youth is on the move."

There can be no more important task for our educators than to capture the imagination of the youth of this great nation with a vision of American leadership in world affairs.

We cannot stand still nor go back to the obsolete ways of life, since belief in their authority and their sanctions is gone. We must go forward in faith and hope. We must try to gain real insight into the personalities of others and a more sympathetic awareness of them. No one is untouched by the situation, and no one is free from anxiety or the fervent need of reassurance and intimacy. When we seek to understand the influence of changing social, economic and political conditions upon the home and family, let us remember to go behind the housing, the conveniences, the draft, possible intervention of the United States in war and the thousand and one other sources of anxiety. Let us try to envisage the groping boy and girl who, amidst these changes, are seeking something stable and effective for those enduring human needs that we hope will some day find a new fulfillment in the good society which all this turmoil and confusion will produce.

*"Youth in the Depression" by Kingsley Davis, University of Chicago Press.

MSMS

Chemotherapy in Acute Hematogenous Osteomyelitis

A Case Report

B. J. Fieldhouse, M.D.
Ida, Michigan

B. J. Fieldhouse, M.D.
A.B., Lake Forest College 1932. M.D., Northwestern University Medical School, 1937. Member of: Staff Mercy Hospital, Monroe, Michigan; Associate Staff Flower Hospital, Toledo, Ohio; Michigan State Medical Society.

■ It has been only in the past few years that chemotherapy has come to play an important rôle in the treatment of acute osteomyelitis. The literature fails to record any early case reports with the use of prontosil in the early days of this sulfonamide. Weidekamp[6] reported its use in tuberculosis of the bone with failure. Since 1938 the literature shows an increasing number of reports on the subject. Mitchell[5] recorded one of the earliest groups of cases with the use of Ulceron, a sulfonamide, dimethyl disulfanilamide, and had good results.

The problem of the rôle of surgery with chemotherapy has been a much disputed subject in the treatment of acute hematogenous osteomyelitis. Key and Wilson[3,7] discuss this very subject. Key believes it better surgery to operate early. He states that full doses of sulfathiazole should be given until the fever has subsided and that it is not to be expected that the drug will reach the focus in the bone in sufficient concentration to be effective because the focus contains large numbers of bacteria and is separated from the general circulation by the relatively impermeable wall of inflammation. Consequently, in his opinion, the

bone should be drained early whether or not the drug is used. Wilson on the other hand advocates a delayed operation believing chemotherapy "should delay the hand of the surgeon for a short time while the patient musters his own protective forces." Both agree, however, on the value of sulfanilamide in the streptococci and sulfathiazole in the staphylococci infections in bone and point to the importance of first determining the infecting organism. Dickson[1] reports a similar stand in the initial use of sulfathiazole at least three days prior to surgery.

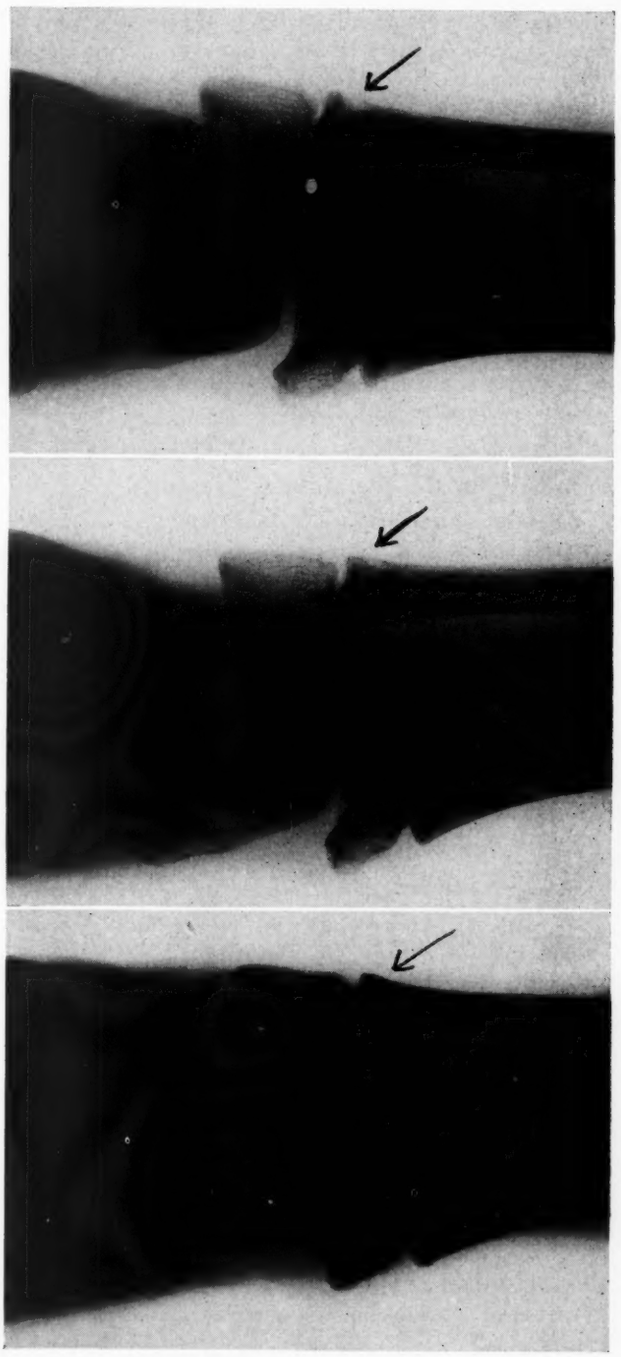
In view of the controversy of the rôle of chemotherapy in acute osteomyelitis some reports indicate that the drugs may eventually play the major rather than the minor rôle in treatment. Long and Bliss[4] state: "We have yet to see a patient suffering from acute hemolytic streptococcus osteomyelitis whose infection was not cured when adequate therapy with sulfanilamide was instituted." Hoyt,[2] using sulfathiazole alone in nine cases treated non-surgically, had only one case develop any drainage and all cases returned to normal activity and are all in excellent condition. It is to be expected that it will take further study with chemotherapy to determine how much we can depend upon its use in the treatment of a disease with a varying degree of severity.

Case Report

L. H., female, aged six years ten months, weighing 60 pounds, presented herself on March 15, 1941, complaining of pain, swelling and redness of the right ankle. These symptoms were first noticed twenty hours before she was seen. During this interval she had chills and fever and could not bear weight on her right foot because of the intense pain. The mother stated that ten hours after the onset of symptoms the temperature was 101.5

On examination the patient appeared somewhat toxic with flushed cheeks, pulse 108 and a temperature of 103.5. The external portion of the ankle showed moderate swelling, redness, local heat revealed by touch and tenderness too great to allow palpation. On the heel of the same foot a pea-sized blister containing a nearly dried yellow pus was seen. There was no other evidence of a source of infection. A diagnosis of acute osteomyelitis was made and sulfathiazole was begun.

Within the first twenty-four hours the patient received 38.5 grains of the drug and 22.2 grains every twenty-four hours thereafter until the temperature was normal for five days. The patient was seen again the next day in the office and her temperature was 101.5, being less toxic and taking more food. The third day the temperature was 100.5 and the following day 99.2 and on this day she developed pain in the left knee which lasted about three hours and never recurred. By the fifth day the temperature was normal and there was little swelling but some tenderness to deep pressure and tapping. Fourteen days after the onset of treatment she developed an upper respiratory infection with a temperature of 99.5 so the drug was continued three days longer after which time she made an



Figs. 1, 2 and 3.

uneventful recovery and returned to school three and one-half weeks following the onset of the disease. She never had any toxic reaction to the drug and her blood remained within normal limits.

Two weeks after the onset of symptoms, March 29, 1941, the first radiograph revealed an osteomyelitis of the lower end of the fibula with a destructive process perforated through the cortex and a small spicule of bone in the soft tissue. Two weeks later, April 12, 1941, the radiograph revealed "healing of the osteomyelitis in the lower end of the fibula." Then six weeks following the onset of symptoms, June 10, 1941, a third radiograph revealed continued healing of the osteomyelitic process with the defect almost obliterated and the sequestrum disappeared.

Summary

1. A case of acute osteomyelitis in a child is reported with recovery following the use of sulfathiazole as the only active treatment.

2. A review of the value of chemotherapy as expressed in the literature is presented.

3. It remains that nice judgment will be needed to determine the therapy used in the treatment of acute osteomyelitis with some indication from this case and other reports given that drugs will play a more important rôle in the future.

Bibliography

1. Dickson, Dively, and Kinne: The use of sulphathiazole in the treatment of subacute osteomyelitis. Jour. Bone and Joint Surg., (July) 1941.
2. Hoyt, W. A.: Personal communication. From cases read at the A.M.A. meeting, 1941 (to be published).
3. Key, J. A.: The early operative treatment of acute hematogenous osteomyelitis. Surgery, 9:657-665, (May) 1941.
4. Long and Bliss: The Clinical Use of Sulphanilamide. Page 176.
5. Mitchell, A.: Treatment of acute osteomyelitis with uleron. Brit. Med. Jour., (Dec.) 1938.
6. Weidekamp, J.: Deutsche Med. Wchnsch., 64:854-866, (June) 1938.
7. Wilson, J. C.: The delayed operative treatment of acute hematogenous osteomyelitis. Surgery, 9:666-674, (May) 1941.

EXPERIMENTAL PROCEDURES

Estrogenic Hormone for X-Ray Burns

By Charles W. Sellers, M.D.
Detroit, Michigan

CHARLES W. SELLERS, M.D.

M.D., Wayne University College of Medicine, 1917. Member of the Staff of Grace Hospital, Detroit. Member, Michigan State Medical Society.

■ EVER since Dr. Roentgen devised the x-ray apparatus, unwary operators of this equipment have been exposed to the possibility of giving or receiving overdoses of the ray. Various people tolerate varying exposures but everyone evidently has a threshold beyond which they cannot tolerate the ray without destruction of tissue.

Small repeated exposures cause persistent dermatitis while larger doses, often a single dose, causes complete destruction of the skin with resulting ulcers that are exceedingly painful, irritating and resistant to treatment. Patients and operators exposed sufficiently to cause typical and severe x-ray burns usually experience these lesions for a long time.

The treatment of these "burns" has been somewhat empirical, largely symptomatic and entirely unsatisfactory. Treated as other burns they gradually improve but entirely too many fail to recover completely and persist as indolent ulcers, *ad infinitum*.

Favorable results with the use of estrogenic hormone in oil in three cases that came under my observation prompt me to report them.

On June 28, 1940, a patient came to me with a small piece of glass imbedded in the left small finger. It had been there for several months and caused considerable pain on pressure. It was visible under the fluoroscope. A small incision was made under novocain anesthesia and it was removed by grasping it with a small forceps guided with the aid of the fluoroscope. The whole process may have taken two minutes. The x-ray was a new portable type with transformer and tube in a single case. The meter readings were those ordinarily used for fluoroscopy. Evidently, however, we were too close to the tube because two weeks later both the patient and I developed typical x-ray burns of the fingers.

Treatment of a conventional nature over a period of ten months failed to see them entirely healed. The patient and I each had a small ulcer about one-half inch in diameter on a finger. We used tannic acid ointment, Aquaphor, cod liver oil ointment, vitamin A ointment, maggot extract ointment, allantoin, Nupercainol, allantoin and urea ointment, scarlet red ointment, silver nitrate applications, etc., all with but slight avail.

At the beginning of the eleventh month estrogenic hormone in sesame oil 10,000 units per c.c. was used as a topical application on the assumption that it might stimulate proliferation of tissue. A few drops were placed in the crater of the ulcer and a dressing applied three to six times daily. Improvement was noticed within fifteen days. Curious to know whether it was the hormone or the oil that was helping I secured pure sesame oil and used it for a similar period without visible results. I then used estrogenic hormone in peanut oil and in corn oil each with visible improvement. After approximately thirty days continuous treatment the ulcers on both the patient and myself were healed.

A third case involving an x-ray burn and ulcer of a left index finger was treated from the beginning in a similar manner. It healed over in two months' time, which is much less than usual.

Three favorable cases do not make a criterion but there seems to be some value in this treatment and further observation and trial are warranted.

MSMS

WILL REPORT "POLIO" RESEARCH IN NEW YORK

Dr. Harry M. Weaver, of the Wayne University College of Medicine staff, will read to the National Foundation for Infantile Paralysis, December 4, in New York City, a report of research work carried on for 18 months at the college on poliomyelitis.

The Foundation provided the funds for the Wayne research, in which possible effects of vitamin deficiencies upon susceptibility to the disease have been studied. Eastern cotton rats, the only creatures besides primates which are susceptible to "polio," have been used as the experimental animals. The work is now continuing under a recent renewal of the original one-year grant. —*Wayne University Newsletter,* December 3, 1941.

DAVID WHITNEY HOUSE

THE Wayne County Medical Society now has its own permanent home, the beautiful David Whitney House at 4421 Woodward Avenue, Detroit, which the Society has occupied during the past ten years. The Society received the home in conveyance from the Whitney family of Detroit, as a 1941 Christmas present. Mr. David C. Whitney, with Mrs. Whitney and his niece, Mrs. Pinkney Tuck, was the owner of the property. Acceptance of the deed by the Society's Board of Trustees and Council was approved by the membership at the regular meeting of the Society on December 1.

The deed conveying the David Whitney House to the Wayne County Medical Society recites that the Whitneys have long had and still enjoy and desire to foster close association with the members of the medical profession, for which they have the highest regard. They desire to increase the facilities of the profession and to aid in advancing medical standards by providing the Society with a dignified home of its own where it can carry out its charitable, educational and scientific purposes.

In thanking the Whitney family and Nathan T. Viger, secretary of the Whitney Realty Company, C. E. Simpson, M.D., president of the Wayne County Medical Society, wrote: "Yours has been a grand contribution to the greatest thing that ever has happened to further the scientific, educational, and charitable activities of the medical profession as a group in this community. The Society and its officers thank you sincerely."

WAR HAS COME

ON a recent Sunday afternoon, at a time when most of us had finished our dinners and were starting to look at the newspaper, came the startling report of an attack upon the United States by an aggressor nation. It seemed unbelievable, but it was true. From every indication the struggle will be protracted, it will require an "all out" effort of every citizen of the nation.

The record of the medical profession of Michigan in the last world war was an honorable one. The tradition maintains. Each of us, in the past few weeks, has been giving some thought as to what his own rôle will be in the present war.

Well over three hundred Michigan physicians are already on active duty with the armed forces of the nation, a number which ranks high among the states. All credit to them for their prompt response in our country's preparedness program.

And now among the first calls will be one for more of our doctors of medicine. We should make our plans promptly as to how we may best serve the country.

Our Medical Preparedness Committee under the active chairmanship of Past President Urmston has already held a number of meetings, and has taken active steps in several phases of the defense program. The physicians of Michigan will again lead in service to their country as they did during the first world war.

Henry R Carstens

President, Michigan State Medical Society

President's

Page

EDITORIAL

YOUR OPPORTUNITY

At the request of Dr. Fishbein, this editorial, which appeared in the Journal of the A.M.A., December 27, 1941, is reprinted. A copy of the blank by which each physician may place his name with the Procurement and Assignment Service has been printed on page 64.

■ THE nation is at war. The Congress has passed an amendment to the Selective Service Act which will call for registration of every man up to the age of 65 and which will place all men under 45 years of age subject to service at the order of the Selective Service boards.

The Procurement and Assignment Service for Physicians, Dentists and Veterinarians was established by order of the President on October 30. Thus the medical profession itself aids in determining proper distribution of the medical profession in supplying the needs of the armed forces and maintaining medical service to civilian communities, public health agencies, industrial plants and other important needs.

At a meeting of the Procurement and Assignment Service held in Chicago at the headquarters of the American Medical Association on December 18, jointly with the Committees on Medical Preparedness of the American Medical Association, the American Dental Association and the American Veterinary Medical Association, plans were drawn for making immediately available to the United States Army and Navy Medical Corps the names of physicians who wish to be enrolled promptly in the service of the government in this emergency.

On page 2255 is published a blank by which every physician may at once place his name with the Procurement and Assignment Service as one who is ready to serve the nation as the need arises. If you wish to make yourself available for classification, fill out this blank and send it at once to Dr. Sam F. Seeley, Executive Director of the Procurement and Assignment Service. When these blanks are received, they will be classified and checked with the information available in the national roster of physicians at the headquarters of the American Medical Association.

For two thousand and nine counties in the United States, lists have been prepared indicating physicians who are engaged in necessary civilian projects, public health services or educational activities from which they cannot be spared. Shortly the rest of the counties will have such lists available.

In each of the corps areas covering the United States a committee is being established, including representatives of medical, hospital, educational, dental and veterinary activities. In the individual states, committees of medical, dental and veterinarian professions are being established through which the corps area committees will exercise their functions. In each county also local communities will provide accurate information regarding the status of each member of the profession concerned.

The raising of the Selective Service age from 28 to 45 will place a great number of additional physicians in the category of those on whom the nation may call as their services are needed. Estimates indicate that some sixty thousand physicians thus become available for service and that forty-two thousand dentists under the age of 45 also become subject to call. By enrolling with the Procurement and Assignment Service immediately, utilizing the blank on the opposite page, all physicians, but particularly those under forty-five years of age, insure to every extent possible, assignment to the type of service for which they are best fitted. They avoid thus also the possibility of unclassified service with the United States Army during the period that may be necessary following selection by the Selective Service before the commission can be secured. A physician called by the Selective Service who has not enrolled or who is not on a reserve list obviously serves without a commission during the time that necessarily elapses before a commission is secured. In future issues of *The Journal* announcements will be made regularly of the numbers of those who enroll and of the extent to which the immediate needs of the Army, Navy and other government agencies are being supplied.—Editorial, *Jour. A.M.A.*, December 27, 1941.

REMEMBER PEARL HARBOR

■ STORIES of heroism and valor of the officers and men in the armed forces of the United States during the treacherous attack on Pearl Harbor have begun to seep through but it is likely that the usual "work under fire" of the Medical Corps will not be considered of sufficient news value to be spread on the pages of the magazines and daily papers. It is probable that the doctors of medicine and nurses went at their work in the same routine as during peace. Romance and thrill are necessarily subjugated to a work needed to be done in an expert manner.

Pearl Harbor brought us out of our lethargy just as a cold towel sobers an hysterical child. We are at war and it is to be a long hard war. The citizens of the country have responded nobly to the call for arms. The recruiting offices are overflowed and every citizen is asking, "What can I do to help?" Medical men have been slow in answering the country's need for medical officers. There were many reasons in the past for this dilatory attitude, *but not now.*

We are at war!

Major John G. Slevin writes:

"Even before war was declared the Army was short 2,000 medical officers! For every additional million men called to the colors the Army will need 8,000 more medical officers, not counting replacements. In the present rush to enlist, the younger physicians, those under thirty-five, have been conspicuous by their absence. Only when pushed by the local draft boards with the threat of induction into the Army as privates, have they made any effort to obtain commissions. In contrast, the older doctors, those from forty-five to sixty, have sought to serve their country. These are facts which we as medical men wish weren't so. But they are facts nevertheless.

"Will American medicine finally fail to heed our Nation's call? The answer rests with the junior members of our profession.

"The Army needs doctors. Not just the 2,000 that would do last month, but very soon now eight or ten times that number.

"The Army will get doctors—somehow. Let us hope it will be by the traditional method of American medicine, by volunteers.

"So that there can be no question as to who is eligible to apply for a commission, may I ask you to publicize the following information:

"To be eligible for a commission, physicians must be between the ages of 21 and 35; American citizens; graduates of Class 'A' medical schools; licensed to practice medicine in a state or territory of the United States; actually engaged in the ethical practice of medicine and able to pass the required physical examination.

"All commissions at present are granted in the Army of the United States for the duration of the War, in the original grade of First Lieutenant. No provision has as yet been made to commission certified specialists in grades above that of First Lieutenant.

"The salary of First Lieutenants (including allowances for quarters and subsistence) is $224.67 per month for single men and $262.67 per month for married men.

"Application should be made to Major John G. Slevin, Medical Corps, Medical Officer for the Michigan Military Area at 401 Federal Building, Detroit, Michigan, or to the District Executive, at one of the following Military Districts: Lansing, Kalamazoo, Grand Rapids, or Saginaw, Michigan. Each district office is in the local Post Office Building.

"Interns, including fifth year medical students who are interning, should apply for commissions now. The War Department has stated that interns will be allowed to finish twelve months of internship prior to being called to active duty. However, no deferment will be granted to those who hold hospital residencies."

Although the present regulations will take only physicians under thirty-five, many changes in these regulations are certain to be made.

Material benefits of obtaining commissions early are many but the true basic appeal is that your country needs you and needs you now.

CIVILIAN DEFENSE

■ P. R. URMSTON, M.D., past president of the Michigan State Medical Society and present chairman of the Medical Preparedness Committee of the MSMS, has been made chairman of the Committee on Emergency Medical Service for Michigan, which is a subcommittee of the Michigan Council of Defense, created by an Act of the 1941 legislature. This State Council of Defense functions with and through the metropolitan defense units which were designated by Fiorello H. LaGuardia, Chief of the Office of Civilian Defense of the United States government.

A meeting by Colonel Furlong and the Committee on Emergency Medical Service was held December 11 at which time assurance was given that doctors of medicine, nurses, and hospital staffs are ready to go into action on short notice. Present were representatives of the Michigan State Medical Society, Michigan Hospital Associ-

ation, Michigan Nursing Association, Michigan Chapter of the American Red Cross, pharmacists of the state, and the Michigan Department of Health.

All hospitals are being surveyed to determine the maximum number of beds which could be made available in the event of disaster. Plans are being completed for the evacuation of convalescent patients to their homes or to outlying establishments in case of need.

Each county, of course, has its own peculiar problems, and this Committee on Emergency Medical Service will serve both in advisory and administrative capacities. Doctors of medicine who are not available for services with the armed forces should rally behind this Committee and its work. There is a place for every physician in the present crisis and a doctor of medicine is needed for that place. If you have not been approached by your local Committee be sure to offer your services.

THE VALUE OF MEDICAL MEETINGS

Conventions have become, more and more, an integral part of American professional and business life. From our observations, we believe that medical meetings, both local and national, stand at the top, from the point of view of worth-while programs for all who attend.

The medical convention provides an opportunity for the physician to get away from his busy routine of practice; to relax a little; to fraternize with his colleagues; and to learn much that will help him in his service to his patients.

A medical meeting with a carefully planned program offers a veritable refresher course, as leaders in their fields speak from the platform or conduct clinics, sharing with others the benefits of their experience.

The scientific exhibits, in recent years, have reached a new high, in bringing to the meetings demonstrations of the most recent advances in medicine and surgery. Thus the physician may keep in step with the changes which are taking place with almost kaleidoscopic rapidity.

Last, but not least among the attractions at the larger meetings, should be mentioned the technical exhibits, where ethical pharmaceutical manufacturers and other purveyors to the profession exhibit the latest products, developed to serve the physician. Here the physician may talk leisurely, free from waiting patients and sick calls, with well informed representatives of the leading houses.

All in all, the medical convention spreads out before the attending physicians the results of millions of dollars' worth of clinical and laboratory research. Those who attend and those who participate do much to advance the cause of alleviating human ills.—*Patchwork*, Nov.-Dec., 1941.

ENROLLMENT FORM FOR PROCUREMENT AND ASSIGNMENT SERVICE FOR PHYSICIANS

Dr. Sam F. Seeley, Executive Officer
Procurement and Assignment Service
New Social Security Building
4th and C Streets S. W.
Washington, D. C.

Dear Doctor Seeley:

Please enroll my name as a physician ready to give service in the Army or Navy of the United States when needed in the current emergency. I will apply to the Corps Area commander in my area when notified by your office of the desirability of such application.

Signed.....

1. Give your name in full, including your full middle name:
2. The date of your birth:
3. The place of your birth:
4. Are you married or single?
5. Have you any children? If so, how many?
6. Do you believe yourself to be physically fit and able to meet the physical standards for the Army and Navy Medical Corps?
7. Have you filled out previously the questionnaire sent to all physicians by the American Medical Association?
8. When and where were you graduated in medicine?

.....

9. In what state are you licensed to practice?

.....

.....

10. Do you now hold any position which might be considered essential to the maintenance of the civilian medical needs of your community? If so, state these appointments:

.....

.....

.....

11. Have you previously applied for entry into the Army or Navy Medical Service? If so, state when, where and with what result (if rejected, state why).

.....

.....

.....

.....

.....

Signature .....

Address .....

Date.....

You Are Going to Pay More Taxes

By Hazen J. Payette, LL.B.

This article on Income Taxes is the second in a series of two written especially for THE JOURNAL *of the Michigan State Medical Society by Mr. Payette, a member of the Detroit Bar, out of a wealth of experience with the Internal Revenue Code.*

IN last month's article, it was pointed out that a new tax bill affecting your 1941 income would most likely be passed the early part of 1942. Despite the fact that momentous happenings have occurred since that writing, it now appears reasonably certain that no new laws will be passed affecting your 1941 income.

Deductions

Considerable confusion exists regarding the change in status of the first dependent in certain instances. In prior years a person (other than a married man living with wife) who was the head of a family and acquired that status because he maintained a home for one or more dependents, was permitted, in addition to his personal exemption, a credit of $400.00 for each dependent. Under the present law, no credit is allowed for that dependent who caused his status. Thus a widower who maintains a home for one dependent is entitled to an exemption of only $1,500.00. However, should there be two or more children for whom he maintains a home and only one of the children is classed as a dependent (due to age, for example), he is entitled to claim deduction for that child, as his status as head of the family is not occasioned solely because of its existence.

In order to claim a person as a dependent, that person must be under eighteen years of age or incapable of self-support because of a mental or physical deficiency. While no age has been set at which a person may be classed as physically defective, there have been instances where unemployed women of fifty and men of sixty have been accepted as dependents.

A question frequently asked is why the status at the end of the taxable year controls with regard to personal exemption and credit for dependents. This is true only when an Optional Return is filed. In filing the Regular Return you can claim deduction from the time your status changed. As an example, if a child reached his eighteenth birthday on December 1, the taxpayer is permitted to deduct 11/12ths of $400.00. Under the optional form no deduction whatsoever would be allowed as the child would not be a dependent at the end of the taxable year. However, if a child was born on December 1, under the regular form the taxpayer would be entitled to only 1/12th of $400.00, while under the optional form the full $400.00 exemption could be taken.

Contributions

The law permitting deduction of contributions to religious, charitable, literary, scientific or educational organizations has not been changed and the only limitation imposed is that such contributions cannot exceed 15% of your net income before the deduction is taken. Incidentally contributions to the U.S.O. and the British War Relief Society are deductible. With regard to a joint return, the Supreme Court has held that the 15% limitation applies to the combined net income of husband and wife.

Bad Debts

Experience has shown that deductions under this item were illegally taken by many taxpayers who generously closed old accounts and called them "bad debts." The rule is simple: if you reported the obligation as income for the year in which it was earned, it may be deducted in the year you ascertained it was worthless. While you are not compelled to institute legal proceedings, your decision must be made in good faith and you must stand ready to prove to the satisfaction of the Collector that such was the case.

As most professional men keep their books on a cash basis and report only that income actually received, their deductions for "bad debts" would be limited to those instances where the debt arose from the actual payment of money or the transfer of property, and the reason for declaring the debt bad must be other than their unwillingness to enforce collection.

In recent years the Treasury Department has taken a serious interest in "bad debt" deductions and many taxpayers have been questioned regarding this item. The procedure is generally to check the debtor's income tax return, to ascertain if the debt had been reported by him as an item of income. As this will no doubt occur more frequently in the future because of the lowered exemp-

tions, it is suggested that when one makes a deduction under this item, he not only includes the name and address of the debtor, but the reason that the debt is declared uncollectible. This might save the taxpayer a trip to the Collector's office at a subsequent date.

Compensation Earned Over a Period of Years

An amendment to the Act made in 1939 recognized the fact that some taxpayers, although operating on a cash basis, are not compensated until the completion of their services and therefore should not be required to report the entire sum received as income for that year. Previous to this Amendment, one was required to report all sums received during the taxable year regardless of when they were earned. This resulted in a hardship for persons such as inventors and authors who were not permitted the allowable deductions for the years spent earning this compensation. It is now possible to allocate the amount received in equal portions over the years in which it was earned and pay the additional tax required for each of those years. However, to apply this rule—

> The services for which the compensation was received must have been rendered over a period of five calendar years or more, and—
>
> Not less than 95 per cent of the compensation received must have been paid upon completion of the services.

There is no limitation on the period of years over which this allocation is permitted, the only restriction being that they must have been performed over a period of five years or more.

In the practice of medicine there are instances where claims have been presented to estates for services rendered over a period of more than five years and for which no compensation was received. The application of the foregoing provision in those instances would undoubtedly decrease the tax payment considerably.

Interest on United States Bonds

Interest on government obligations may either be tax free, subject to surtax only if their total value is more than $5,000.00, or subject to both the normal tax and surtax. The category into which each obligation falls is controlled by its issue and classification. As most persons investigate the tax status of bonds before purchase, a listing of the various types and kinds would be of no benefit to the majority of readers.

A general impression prevails that U. S. Savings or Defense Bonds, which are issued at a discount and redeemable at increasing fixed amounts are not taxable as they are noninterest-bearing obligations. Prior to the 1941 amendment, those persons who owned such obligations and reported on the accrual basis were required to report the increment in value each year, while those persons on a cash basis were obliged to treat the increased value as income received in the year of redemption or maturity. The 1941 amendment extends to persons reporting on a cash basis the privilege of reporting the increment in value, as it accrues. However, an election must be made in the taxpayer's return and when made, it applies to all obligations of this type owned, and is binding for all subsequent years unless special permission is obtained from the Commissioner to change the method of reporting. As these bonds increase in value every six months from date of purchase, if one desires to report on the increased value of these bonds, he is required to include in the first taxable year that he reports on the accrual basis, the increment in value from the date of purchase to the last accrual date of that year. Thus if the bond was purchased in June, 1940, the taxpayer's 1941 return would report its increased value as of December, 1941, as part of your gross income.

Information Returns

If during the taxable year of 1941, a taxpayer has paid to any person for "interest, rent, salaries, wages, premiums, annuities, compensations, remunerations, emoluments, or other fixed or determinable gains, profits, and income . . . ," the sum of $750.00 or more, he is required to file a return known as Form 1099, giving such information together with the name and address of the recipient. However, if rent was paid to a real estate agent who acted for either the taxpayer or his landlord, it need not be reported. Likewise amounts paid for merchandise, telephone, et cetera, need not be reported. The return is designed to give the Department information on the income of others and must be filed prior to February 15, 1942.

Treasury Notes

A new plan formulated by the Treasury Department this year permits the income taxpayer

to acquire interest-bearing Treasury Notes which in turn can be used to pay income taxes. These notes are of two groups: Series A, of $25.00, $50.00, and $100.00 denominations, earn about 1.92% per year and can be used in payment of income taxes up to $1200.00. Series B, of $100.00, $500.00, $1,000.00, $10,000.00, and $100,000.00 denominations, earn about 0.48% per year and are acceptable in payment of income tax in any amount. These notes are not registered but the name and address of the purchaser is noted thereon and they can be used only by him in the payment of his Federal Income taxes. However, if they are not used, they can be redeemed by him at the purchase price. The income from these notes is taxable.

Conclusion

In filing a return for this year, it will be well to bear in mind that the Amendments of 1941 were designed to add considerable revenue to the treasury. It is accordingly assumed that in addition to checking on those persons who may have eluded the Collector heretofore, all returns will be scrutinized with unbending minuteness to ascertain their authenticity and ferret out the potential tax. Returns therefore should be logical, consistent and plausible, as one unreasonable item of deduction might cause the examiner to doubt the authenticity of the whole return. It has been our experience, however, that a perceptibly true report will cause little or no trouble to the taxpayer and should he be called in for an explanation of certain items, he will find the examiner ready to give credence to his statements. After all, the examiner is just another working man who must conserve the interests of his employer.

717 Ford Building
Detroit, Michigan

What happens to a woman in London who has a baby and reports the fact in the press is set forth by a columnist in *The New Statesman and Nation:* "Within 48 hours of the announcement my friend had received five letters from (obviously professional) begging-letter writers, three singularly impertinent circulars, with a 'You Have Been Warned' flavor, from vendors of contraceptives, four sets of sample postcards illustrated with a nauseatingly sentimental decor of storks and gooseberry bushes with the correct place-name and data for use in replying to 'kind inquiries,' plus a dozen or more appeals for funds from reputable maternity hospitals all over the country."

YOU AND YOUR BUSINESS

THE MSMS WAR AND DEFENSE EFFORTS

Emergency Medical Field Units

The Chief Medical Officer of the Office of Civilian Defense, Washington, D. C., telegraphed the following important communication to the Michigan State Medical Society on December 10:

"Office of Civilian Defense requests you urge all hospitals to establish immediately Emergency Medical Field Units in accordance with plans outlined in Medical Division Bulletins Number One and Two and drill weekly. Where necessary, Reserve Field Units should also be organized with medical, nursing and trained volunteer personnel derived from the community. Urge immediate action."

P. R. Urmston, M.D., Bay City, Chairman of the MSMS Medical Preparedness Committee, sent immediate messages to every county Medical Preparedness Committee urging that Emergency Field Units be organized at once, and that the Chairman of the county Preparedness Committee take the lead in this program; further, that Reserve Field Units be established where necessary.

MSMS Active in War and Defense

1. The MSMS Medical Preparedness Committee recently mailed a questionnaire to every practicing physician in Michigan, in order to facilitate its work especially in those matters pertaining to the important subject of Civilian Defense. The information to be obtained from these questionnaires will be of tremendous value both in the Civilian Defense and in the War efforts. Each Doctor of Medicine in Michigan is urged to coöperate by executing his questionnaire and returning it to his county Medical Preparedness Committee.

The Medical Preparedness Committee also has been active in encouraging the procurement of 800 medical officers, 100 immediately and 700 in the near future:

(a) by a campaign in the county medical societies;
(b) through the encouragement of junior and senior medical students to seek appointments in the Medical Administrative Corps of the Army or the Medical Department of the Navy;
(c) through the hospitals, where hospital administrators are urged to encourage interns, residents and staff members (under 35 years of age) to apply for commissions in the Medical Reserve Corps.

2. The MSMS Child Welfare Committee has been working on the matter of Child Health in War, which important subject is divided into (a) the problem of child health in defense areas; (b) the problem of child health in war and the evacuation of children from war areas.

3. The MSMS Industrial Health Committee is (a) coöperating in the American Medical Association's study of states which has been inaugurated in Michigan. This survey of industrial health problems will uncover the flaws of industrial health in the essential industries of this state, and attempt to eliminate them in the interests of the war and defense efforts.

(b) A survey of doctors of medicine in industrial practice is being concluded by the Industrial Health Committee in order that necessary professional personnel to serve the country's industry, in the present emergency, will be available.

In addition to the organized activity of the MSMS, approximately 200 Michigan Doctors of Medicine have joined the armed forces of the United States during the past year. This will soon be increased to 1,000 medical officers from this state.

The medical profession of Michigan neither is now nor ever will be found wanting in the war and defense efforts of this country.

Buy U. S. Defense Bonds and Savings Stamps

MICHIGAN USE TAX

The Michigan Use Tax Law, Act 94 of 1937, has recently been upheld by the Michigan Supreme Court. It now becomes effective as applied to Doctors of Medicine and other practitioners, as well as the general public.

The tax covers purchases made in another state.

(Continued on Page 70)

(Continued from Page 68)

The Act provides for a levy of three per cent of the purchase price of any and all tangible personal property stored, used, or consumed in Michigan, on which an equivalent sales tax has not been paid *in this or any other state.* Therefore, it is not collectible against those who have paid an equivalent sales tax in Michigan or any other state.

The Use Tax does not attach to receipts from services performed by doctors of medicine. However, when Michigan physicians purchase supplies such as medicine, instruments, cabinets, fixtures, electrical appliances, furniture or other office or laboratory equipment for either professional or personal use, the three per cent Sales Tax attaches to all such domestic purchases within the state, and the three per cent Use Tax on all purchases made out of the state.

While all professional men wish to comply with the statute requirements of the Use Tax Law, most physicians would be glad to escape the labor and annoyance of bookkeeping and monthly remittances to the Michigan State Board of Tax Administration. The Board, therefore, suggests that physicians demand the Michigan registration of every out of state seller who would then be qualified to collect and remit the Use Tax in behalf of the consumer. To relieve doctors of both clerical work and mental worry, the Michigan State Board of Tax Administration recommends that the responsibility for the payment of the tax should be assumed by the out of state vendor, who can handle the bookkeeping more efficiently and more economically than the doctor of medicine. Where this plan is not used, a doctor liable for the payment of the Use Tax must register with the Michigan State Board of Tax Administration, keep accurate books, and make monthly remittances.

Buy U. S. Defense Bonds and Savings Stamps

"MEANS AND METHODS ORDINARILY USED"

The Florida court recently reiterated a well-recognized rule regarding the liability of physicians for an incorrect diagnosis. The Florida court stated: "A physician or surgeon does not insure the correctness of his diagnosis. His responsibility is to use ordinary skill and diligence and to apply the means and methods ordinarily

and generally used by physicians of skill and learning in the practice of his profession to determine the nature of the ailments and to act upon his honest opinion and conclusion."

Buy U. S. Defense Bonds and Savings Stamps

IS THE PRODUCT COUNCIL-ACCEPTED?

Products advertised in THE JOURNAL of the Michigan State Medical Society must, in every respect, conform to the requirements of the Councils and Committees of the American Medical Association.

Some firms detailing Michigan physicians have products which have not been presented to the AMA for approval. A number of these firms have requested space in the MSMS JOURNAL and in the Convention Exhibit, but have had to be refused.

Physicians will help their patients and their reputations if they insist on purchasing only AMA council-accepted products, and refer to the American Medical Association all firms which attempt to sell them unapproved equipment and supplies.

A good New Year's Resolution: "I shall buy only AMA Council-accepted products, to protect my patients and myself."

Buy U. S. Defense Bonds and Savings Stamps

DREAMING BY INFANTS EXPLORED IN RESEARCH

Evidence that dreams in children may occur before the development of speech is reported by Dr. Milton H. Erickson, assistant professor of psychiatry at Wayne University, in the current issue of the *Psychoanalytic Quarterly*. His report is a contribution to a difficult research field, in which conclusions are still on a tentative basis.

Previous studies have reported that dreams may occur in pre-talking-age children, but the evidence has been based upon sleep phenomena which may have been caused by physiological disturbance rather than psychic activity. Dr. Erickson believes that the case which he reports, involving the reconstruction by a sleeping eight-months-old baby of a play activity learned while fully awake, was evidence of the purely psychic phenomenon called dreaming.—*Wayne University Newsletter*, November 12, 1941.

MICHIGAN'S DEPARTMENT OF HEALTH

HENRY A. MOYER, M.D., Commissioner, Lansing, Michigan

HEALTH LABORATORIES GUARDED

State health laboratories at Lansing have been closed to the public and are under State Police guard as a national defense precaution. Employes have been fingerprinted and they have been given passes for admission to the grounds.

All of the antitoxins, vaccines and serums which are produced by the State Health Department for free distribution to physicians and health departments, are manufactured in the Lansing laboratories. More than two million doses are now produced in a year. In addition, more than 40,000 diagnostic examinations are made monthly in these laboratories.

MSMS

HOUSE TRAILER PARK LAW

Michigan's new law governing the operation of house trailer parks is in effect and more than 500 park operators have been notified by the State Health Department of the requirements they must meet to obtain licenses.

The law makes definite requirements for toilet and shower facilities, sewage disposal, running water, electric lights and space for trailers. A trailer park is defined as one which accommodates three or more trailers.

If there is no full-time health department in the county or city where a park is located, the sanitation inspections will be made by the State Health Department sanitary engineers.

MSMS

TWO DOSE TOXOID NEEDED

October and November outbreaks of diphtheria among older boys and girls in Oakland, Lenawee and Benzie counties emphasize anew the necessity of a second dose of toxoid.

Several years ago it was believed that one dose of toxoid gave protection against diphtheria from babyhood through childhood, but experience proved that the immunity from one injection of toxoid was not necessarily lifelong; in many children it dropped too low to protect them when they still needed protection.

As a result of the diphtheria outbreak in Oakland county, an extensive toxoid program was carried on in the schools to restore immunity in children where it had fallen low.

The two-injection plan of giving toxoid was officially adopted in 1939 by: the Michigan State Medical Society, the Michigan Branch of the American Academy of Pediatrics and the Michigan Department of Health. The recommended schedule is one injection of toxoid at nine months, a second a month later.

MSMS

WRITE LEGIBLY

Names and addresses precisely as written or typed by physicians and health departments on specimen blanks sent to the Bureau of Laboratories will soon become the mailing address of the report blanks returned by the laboratories at Grand Rapids and Lansing. In the past, clerks have copied the test information and addresses onto report blanks, but early in 1942 the Grand Rapids and Lansing laboratories of the State Health Department will put into use a photostat system for keeping these records and reporting them.

The laboratory results will be noted on the original blanks submitted with the test specimens, and in reporting the results, a photostat copy of the whole blank will be made. The name and address as written by the physician or health department thus becomes a mailing address and no corrections or additions will be possible under the new procedure. If a name or address is incomplete or illegible, it will still be incomplete or illegible when photostat copy is made. The photostat method will eliminate errors made formerly in copying results from laboratory blanks to report blanks.

MSMS

MUTINY ON THE BOUNTY

Buried beneath a mass of dry statistics, we noticed a report recently that our large "Foundations" are now devoting a third of their money-grants to medical research, medical teaching and other facets of the healing art. The same study also reveals that education, for decades the pet project of the "Foundations," has been ousted from the number one position by medicine. This solicitude is matched only by increasing government concern with medical care, and our profession is thus the victim of an embarrassment of riches.

Now this is all very flattering, and at first glance, very comforting. Second thought, however, reveals a faint cloud in the horizon. It seems that the man who pays the piper is still entitled to call the tune on any request program. Can it be that the philanthropists and politicians who are opening the purse, are also anxious to dictate the policies? Or is this petulant query just another Mutiny on the Bounty?—*The Journal of the Medical Society of New Jersey*, November, 1941.

Woman's Auxiliary

Bay County

The first meeting this fall was held on October 8, 1941, at the home of Mrs. A. D. Allen. Thirty-three members were present. The president, Mrs. W. R. Ballard, presided at the business meeting and gave an interesting report on the Fifteenth Annual State Auxiliary Convention in Grand Rapids. The recent election of Mrs. P. R. Urmston to the office of fourth vice president of the National Auxiliary was announced. The president announced the appointment of Mrs. Allen as chairman and Mrs. D. J. Mosier and Mrs. Edwin C. Miller as members of the Membership Committee.

Mrs. Harry B. Smith, dietitian at Bay City General Hospital, was introduced by Mrs. W. S. Stinson, and discussed the basic principles of nutrition.

Members of the Hospitality Committee were Mrs. Kenneth Stuart, Mrs. L. F. Laverty, Mrs. J. Norris Asline and Mrs. Paul L. DeWaele.

On November 12 a dinner meeting was held at the Elk's Club with seventeen members present. Mrs. Ballard conducted the business meeting and announced that John Sheldon, M.D., Ann Arbor, would speak at the public meeting early in January sponsored by the Auxiliary on "Allergy." Mrs. Urmston presented proposed revisions in the constitution, to be voted upon at the next meeting.

Mrs. Florence Davenport, director of the Civic League Social Service in Bay City, gave an interesting talk on "Nutritional Problems in the Low Income Group." The Auxiliary voted to collect clothes, toys and other items of value for Mrs. Davenport to distribute to the needy. Mrs. F. T. Andrews was made chairman of the committee.

Genesee County

A board meeting was held on September 9, 1941, at the home of Mrs. Wm. B. Hubbard and delegates were named to the Michigan State Convention as follows: Mrs. Wm. B. Hubbard, Mrs. J. H. Curtin, Mrs. Stephen Gelenger, and Mrs. Hira Branch.

The first regular meeting was held at the home of Mrs. Arthur Kretchmar on September 30. Mrs. Hubbard presided at the business session. Mrs. J. H. Curtin, Mrs. Gordon Willoughby, Mrs. Stephen Gelenger and Mrs. K. R. Sandy reported on the recent State Convention. It was announced that Mrs. Willoughby, a past president of the Genesee County Auxiliary, had been made president-elect of the State Auxiliary.

Ruth Galliett was introduced by Mrs. Otto Preston, program chairman, and spoke on interior decoration. Mrs. Homer Harper and Mrs. Arthur McArthur served at the social hour which followed. Mrs. Vaughn Morrissey and Mrs. Edwin Vary were in charge of arrangements, assisted by Mrs. Hira Branch, Mrs. George V. Conover, Mrs. H. W. Woughter, Mrs. George Anthony, Mrs. Eugene Smith, Mrs. G. R. Backus, Mrs. Clifford Colwell, Mrs. Walter Rundles, Mrs. Gurdon Guile, Mrs. Preston, Mrs. Harper and Mrs. Kretchmar.

The October meeting of the Auxiliary was held on October 28 at the YWCA Building following luncheon. Clifford Colwell, M.D., spoke on the problems confronting the physicians in Genesee County. Mrs. Stephen Gelenger announced seven teams for Red Cross work had been formed, the captains of which were: Mrs. K. R. Sandy, Mrs. C. W. Colwell, Mrs. Harold Woughter, Mrs. Arthur Blakeley, Mrs. N. Arthur Gleason, Mrs. L. H. Childs, and Mrs. Alvin Thompson.

Mrs. Blakeley, Mrs. M. R. Sutton, Mrs. Robert Littler, Mrs. Herbert Randall and Mrs. James Houston were hostesses. Guests were Mrs. J. E. Livesay and Mrs. W. W. Bruce.

Jackson County

A Membership Tea was held on October 14 at the home of Mrs. J. B. Meads. Seven new members were presented.

The regular meeting was held at the Hotel Hayes on October 21 beginning with dinner. The program consisted of three soprano solos, and a play "Have You Had Your Operation?" presented by members directed by Mrs. V. W. Badgley. Mrs. E. A. Thayer, president, conducted the business meeting.

The Projects Committee will direct a First Aid Course given by the Red Cross to Jackson County women. The course consists of twelve two-hour lessons with a Red Cross Nurse as instructor. A subscription to *Hygiea* was ordered sent to Fort Custer.

The November meeting was held at the Cascades Club House on the 18th beginning with dinner. Rabbi Bernard Zeiger gave a very interesting description of his trip to the South Sea Islands.

Kalamazoo County

The first fall meeting was held on October 21 at the Fifth Division Officers' Club, Fort Custer. The wives of the officers of the station hospital were the hostesses. Mrs. W. H. Wiley was chairman in charge of arrangements, assisted by Mrs. Otis Graham, Mrs. S. H. Richmond, Mrs. Bartlett Crane and Mrs. R. K. Warnke. Mrs. Sherman Gregg, president, conducted a short business meeting at which reports of committee chairmen were heard. Following the business meeting bridge was played.

The November meeting was held at the Park American Hotel on the 18th and guests from surrounding counties were entertained. From 3 to 6:30 p.m. several tables of bridge were in play. Dinner was served to seventy-three guests at 6:30 p.m. Mrs. Wm. J. Butler, president of the State Auxiliary, Grand Rapids, was speaker of the evening, and was introduced by Mrs. Roscoe Hildreth.

Kent County

The first meeting was held at the Women's City Club on October 8. Mrs. Charles Ingersoll, president, presided at the meeting. Mrs. John Burleson, *Hygiea* chairman, discussed *Hygiea* and obtained eleven subcriptions from members. Mrs. J. D. Miller, chairman of the Bulletin, told about its value to members. Mrs. Wm. J. Butler, state president, discussed the State Auxiliary Project, the Student Loan Fund and Hospitalization Insurance Plan for Doctors' Widows. Mrs. James K. Miller, Jr., gave a delightful review of "The Book of Maggie Owen." Tea was served with Mrs. Martin Batts and Mrs. J. W. Phillips presiding at the urns.

At the November meeting Mrs. Ingersoll presided. Mrs. Martin Batts announced that W. W. Bauer, M.D., of the American Medical Association, would visit Grand Rapids on December 9, speaking at Ottawa Hills High School, the Lions Club and presenting a broadcast at Station WLAV.

Following the business meeting Rev. Milton M. McGorrill spoke on "The Luxury of Thinking in a World Gone Mad."

A dinner dance was held December 6 at the Peninsular Club, Mrs. J. Donald Flynn acting as chairman.

✶ COUNTY AND PERSONAL ACTIVITIES ✶

The membership of the Michigan State Medical Society as of December 1, 1941, is at an all-time high of 4,589.

100 Per Cent Club for 1942

Muskegon
Sanilac

The above two county medical societies have certified 1942 dues for every member of their respective societies to be the first 100 per cent paid up counties for next year. Michigan State Medical Society dues for 1942 are $12.00.

THE JOURNAL of the Michigan State Medical Society can be relied upon for its authentic advertising. Readers may have faith in the advertisements in the MSMS JOURNAL. The products are A.M.A. Council-accepted.

* * *

The Detroit Academy of Medicine held its annual meeting at the Detroit Golf Club on October 14, 1941. Frederick G. Buesser, M.D., the retiring President, was host. J. Milton Robb, M.D., assumed the duties of President for the forthcoming year. Alfred D. LaFerte, M.D., was chosen as President-elect and Robert J. Schneck, M.D., as Secretary.

The Detroit Academy of Medicine was organized in 1869 by a group of twelve physicians and has been continuously active since that time.

Harold A. Miller, M.D., Lansing, addressed the Lapeer Rotary Club in Lapeer on December 2, 1941.

Wm. A. Hyland, M.D., Grand Rapids, spoke to the Women's Club in Greenville on December 4, 1941, on "Cancer Control."

F. T. Andrews, M.D., Bay City, addressed the Saranac Lions Club in Saranac on December 15, 1941.

Cecil Corley, M.D., Jackson, spoke before the Hillsdale County Medical Society on December 16 on the subject of "Influenza."

* * *

The Michigan Board of Registration in Medicine reëlected the following officers at its Annual Meeting in Lansing on October 14, 1941:

President—Elmer W. Schnoor, M.D., Grand Rapids
Vice President—Claude R. Keyport, M.D., Grayling
Secretary—J. Earl McIntyre, M.D., Lansing.

Attorney General Herbert J. Rushton has appointed Mr. Milton G. Schancupp of Owosso, Special Assistant Attorney General, as Legal Counsel and Investigating Officer to the Board.

* * *

A $100 cash prize, a gold medal and certificate of award have been offered by the Mississippi Valley Medical Society for the best unpublished essay on any subject of general medical interest (including medical economics) and practical value to the general practitioner of medicine. Contestants must be members of the American Medical Association who are residents of the United States. Contributions shall not exceed 5,000 words, must be typewritten in English in manuscript form, submitted in five copies and received not later than May 1, 1942. Further details may be secured by writing Harold Swanberg, M.D., Secretary, 209 W.C.U. Bldg., Quincy, Illinois.

"Doctors at Work" is the name of the dramatized radio program broadcast by the American Medical Association and the National Broadcasting Company which went on the air beginning December 6, 1941, 5:30 to 6:00 p.m. EST. The program is being broadcast each Saturday evening over upwards of 75 stations affiliated with the Red Network coast to coast.

"Doctors at Work" is a continuation of the serialized story broadcast last year. The new series will resume where last year's story left off, with the marriage of the young physician and his subsequent life in time of national emergency in a typical medium-sized American city.

* * *

Michigan physicians were authors of articles in recent issues of *The Journal of the American Medical Association* as follows:

Reed M. Nesbit, M.D., and Wm. G. Gordon, M.D., Ann Arbor, "The Autonomous Neurogenic Bladder" issue of December 6, 1941.

Jack S. Chudnoff, M.D., Detroit, is co-author with Paul C. Hodges, M.D., Omar John Fareed, M.D., and George Ruggy, M.D., of Chicago of "Sodium Fluoride Poisoning" in the same issue.

F. H. Top, M.D., and D. C. Young, M.D., Detroit, wrote "Scarlet Fever" in the issue of December 13, 1941.

* * *

The Professional Liaison Committee representing the Dental, Pharmaceutical and Medical Professions, authorized by the 1941 House of Delegates of the Michigan State Medical Society, has been formed as follows:

Representing the Michigan State Dental Society—

C. H. Jamieson, D.D.S., Detroit
Harry F. Parks, D.D.S., Jackson
F. D. Ostrander, D.D.S., Ann Arbor

Representing the Michigan State Pharmaceutical Association—

Jack H. Webster, Detroit
Bernard A. Bialk, Detroit
C. B. Campbell, Jackson

Representing the Michigan State Medical Society—

Allan McDonald, M.D., Detroit
Harrison S. Collisi, M.D., Grand Rapids
Fred R. Reed, M.D., Three Rivers

* * *

Your Friends

Detroit Creamery Company, Detroit, Michigan
Detroit X-Ray Sales Company, Detroit, Michigan
Dictaphone Corporation, Detroit, Michigan
The Dietene Company, Minneapolis, Minnesota
Doho Chemical Corporation, New York City
Duke Laboratories, Inc., Stamford, Connecticut
E. & J. Resuscitator Company, Detroit, Michigan
J. H. Emerson Company, Cambridge, Massachusetts
The Ediphone Company, Grand Rapids, Michigan
H. G. Fischer & Company, Chicago, Illinois

The above ten firms were exhibitors at the 1941 Convention of the Michigan State Medical Society and helped make possible for your enjoyment one of the outstanding state medical meetings in the country. Remember *your friends* when you have need of equipment, medical supplies, appliances or service.

* * *

Woman's Hospital, Detroit, celebrated Hospital Day on December 3, 1941. Among the speakers on the program were Charles F. McKhann, M.D., Ann Arbor, on "Antenatal and Postnatal Influences on Physical and Mental Development of Infants"; Norman R. Kretzschmar, M.D., Ann Arbor, on "Intrauterine Oxygenic Exchange"; Willis D. Gatch, M.D., Indianapolis, on "The So-Called Toxemias of Burns, Peritonitis and Bowel Obstruction"; and Wm. A. Scott, M.D., Toron-

to, on "Observation of Some of the Difficulties of Gynecological Diagnosis." Following the banquet at Huyler's L'Aiglon Restaurant, Professor Preston Slosson, Ann Arbor, addressed the group on "Europe's Extremity as America's Opportunity."

* * *

The Michigan Association of Industrial Physicians and Surgeons has announced the elaborate plan for their annual meeting to be held in Flint, April 8, 1942. The Program Committee consisting of A. H. Wittaker, M.D., chairman, of Detroit; C. P. McCord, M.D., of Detroit; F. B. MacMillan, M.D., of Detroit; L. H. Childs, M.D., of Flint; A. W. George, M.D., of Detroit; L. E. Sevey, M.D., of Grand Rapids; G. C. Penberthy, M.D., of Detroit; E. H. Hanna, M.D., of Detroit; and V. S. Laurin, M.D., of Muskegon, have promised a concentrated course in industrial medicine and surgery.

* * *

The Annual Clinic Day and Banquet of the Mount Carmel Mercy Hospital originally scheduled for January 28, has been postponed indefinitely because of the national emergency.

* * *

The Michigan Pathological Society held its annual meeting at the University Hospital, Ann Arbor, on December 13, 1941. Thirty were in attendance. The program included discussion of "Problem Cases," by Drs. E. F. Ducey, O. A. Brines, C. E. Black, G. L. Bond, A. A. Humphrey, W. M. German, H. Prentice, F. W. Hartman, S. E. Gould, and the showing of a colored motion picture by Dr. W. M. German, the title of which was "Colombia, South of Panama." The film was recently made by Dr. German on his trip to Bogota, Colombia.

The following were elected officers for the year 1942: President, Dr. H. E. Cope; President-elect, Dr. H. Prentice; Secretary-Treasurer, Dr. D. C. Beaver; Councillor, Dr. Edgar H. Norris.

The February meeting will be held on February 14, at Lansing, where the Society will be entertained by Dr. H. E. Cope and Dr. C. E. Black.

* * *

A. R. Woodburne, M.D., Grand Rapids, has been appointed General Chairman on Arrangements for the 1942 Convention of the Michigan State Medical Society which will be held in the Furniture City, September 22, 23, 24, 25, 1942.

* * *

P. R. Urmston, M.D., Bay City, was elected chairman of the Health and Medical Committee of the Michigan Council of Defense. Doctor Urmston is also Chairman of the MSMS Medical Preparedness Committee.

* * *

Wm. J. Burns, Executive Secretary of the Michigan State Medical Society, was appointed by the Governor to the Commodities Distribution Committee, Michigan Council of Defense. The first problem referred to this state advisory committee was the rationing of tires.

* * *

Jerome W. Conn, M.D., Ann Arbor, has been appointed as the Michigan State Medical Society representative to the Michigan Nutrition Defense Committee. The committee studies and makes recommendations concerning possibility of substitute foods and what foods are absolutely essential, and sets up local committees on nutrition to meet nutrition problems in defense.

IN MEMORIAM

Artemas W. Chase of Adrian was born September 7, 1875, in Raisin Township, and was graduated from the Detroit College of Medicine and Surgery in 1900. After graduation he began the practice of medicine in Adrian and with the exception of service in France during the World War, always practiced in Adrian. He established an enviable reputation as a physician in his earlier years and gradually became an authority on chest diseases and a specialist in roentgenology. In 1917 Doctor Chase enlisted in the Medical Corps of the U. S. Army and served as a regimental surgeon with the Coast Artillery in France for almost three years. At the end of the war he was honorably discharged with the commission of Major. He returned to resume his practice in Adrian. Dr. Chase was a member of the Detroit Roentgen Ray and Radium Society and later served as vice president of the Michigan Roentgen Ray and Radium Society. He served as mayor of the city of Adrian for three terms. He died November 7, 1941.

* * *

Louis Klein of Nutley, New Jersey, was born in 1885 in Brooklyn, N. Y., and was graduated from the Medical College of Long Island University in 1906. Dr. Klein had been clinical research director and editor of the *LaRoche Review* for the pharmaceutical plant of Hoffman-LaRoche, Inc., of Nutley, New Jersey. Before joining Hoffman-LaRoche, he was associated with Parke, Davis Company of Detroit and New York for fifteen years. Dr. Klein died October 25, 1941.

* * *

John A Rickert of Allegan was born in St. Clair County in 1895 and was graduated from the Detroit College of Medicine in 1921. He enlisted in the Medical Corps during the World War, receiving his honorable discharge in 1919. After receiving his medical degree, he began practice in Detroit. In the summer of 1922, he accepted a call to Allegan and opened the Emergency Hospital in that city. During his practice, he broadened his knowledge in surgery, taking postgraduate courses in the Crile Clinic of Cleveland. Doctor Rickert died after a long illness, on October 9, 1941.

CLASSIFIED ADVERTISING

READING NOTICES

THE BORDEN COMPANY ACQUIRES MULLER LABORATORIES

The Borden Company has acquired The Muller Laboratories of Baltimore, Md., producers of Mull-Soy, a milk substitute in fluid form for use in diets of persons allergic to the proteins of cow's milk.

The laboratories will be operated under the direction of the Prescription Products Department of The Borden Company and will continue under the management of Dr. Julius F. Muller.

Mull-Soy, which is sold in drug stores on the recommendation of physicians, is in liquid form in tins of 15½ fluid ounces. It is prepared from soybean flour, soybean oil, dextrose, sucrose, calcium and sodium salts. It has been in production since 1936.

Dr. Muller obtained his B.S. degree at Rutgers University in 1922, his M.S. at the same institution in 1928, and his Ph.D., also at Rutgers, in 1930, following a Walker-Gordon Fellowship.

THE "SULFA" DRUGS

In 1937 sulfanilamide became available generally and proved to be extremely useful in the treatment of infections due to B. hemolytic streptococci and meningococci. In addition, the drug soon was being employed in urinary tract infections, trachoma, chancroid, lymphogranuloma venereum, and certain cases of gas gangrene, and it demonstrated some benefit in gonorrhea, undulant fever, and actinomycosis. Approximately two years later sulfapyridine was being widely used in the treatment of pneumococcal infections and was found to be more effective than sulfanilamide against gonococci. After only another year sulfathiazole began to replace sulfapyridine because it was as effective against pneumococci and gonnococci, more effective against staphylococci, and occasioned fewer reactions. In urinary tract infections sulfathiazole was superior to sulfanilamide in most cases. Now sulfadiazine is being introduced and it has the advantage of a lower index of toxicity, which makes possible the maintenance of high blood levels.

This group of drugs has become exceedingly widely employed. Soon there will be only a small proportion of the general population which has not received one of them as treatment of some variety of infection (South. M.J., 34:1214, 1941). It behooves the physician to choose carefully the most specific and least toxic one for his case. A wide variety of dosage forms have been made available by Eli Lilly and Company.

"IS THIS PRODUCT COUNCIL-ACCEPTED?"

This is the first question many physicians ask the detail man, when a new product is presented.

If the detail man answers, "No," the doctor saves time by saying, "Come around again when the Council accepts your product."

If the detail man answers, "Yes," the doctor knows that the composition of the product has been carefully verified, and that members of the Council have scrutinized the label, weighed the evidence, checked the claims, and agreed that the product merits the confidence of the physicians. The doctor can ask his own questions, and make his own decision about using the product, but not only has he saved himself a vast amount of time but he has derived the benefit of a fearless, expert, fact-finding body whose sole function is to protect him and his patient.

No one physician, even if he were qualified, could afford to devote so much time and study to every new product. His Council renders this service for him, freely. Nowhere else in the world is there a group that performs the function so ably served by the Council on Pharmacy and Chemistry and the Council on Foods.

Mead Johnson & Company coöperates with both Councils, not because we have to but because we went to.

SQUIBB INTRODUCES CAPSULES FERROUS SULFATE WITH B_1

To supplement their line of products for use in the treatment of anemia, E. R. Squibb & Sons, New York, have introduced Capsules Ferrous Sulfate with B_1. Each capsule contains 3 grains ferrous sulfate exsiccated (approximately 60 mg. iron) together with 1 mg. pure crystalline thiamine hydrochloride (333 U.S.P. XI units vitamin B_1).

Capsules Ferrous Sulfate with B_1 Squibb are designed for oral administration in the prophylaxis and treatment of secondary anemia, especially where the addition of vitamin B_1 is considered desirable, as during pregnancy and lactation, infancy and childhood, and in patients with anorexia associated with thiamine lack. They may also be useful as a supplement to liver therapy in the treatment of pernicious anemia when an iron deficiency also exists.

The suggested daily dosage for adults is 3 capsules, possibly increased to 4 or 5 during pregnancy, and for children, 1 or 2 capsules. They are preferably taken in divided doses 15 to 30 minutes before meals.

INSTITUTE FOR BETTER POSTURE

S. H. Camp and Company recently announced the establishment of The Samuel Higby Camp Institute for Better Posture. The Institute has been established to meet the overwhelming number of requests for information concerning posture and its relation to health. The Institute will augment the activities of National Posture Week through the creation and dissemination of additional material throughout the year.

S. H. Camp & Company has pledged that the Institute will coöperate in its work with members of the medical profession and other ethical groups; further it will endeavor to impress upon the public not only the importance of good posture as it relates to good health, but will emphasize the desirability of periodic health examinations and professional medical counsel and guidance for special exercises and diets.

AIDS NURSE-TRAINING PROGRAM

Miss Eleanor King, former instructor in nursing at Yale University and the University of California, has been named assistant coördinator of the three-year undergraduate defense program administered by Wayne University for training additional students in local cooperating schools of nursing. She will work in cooperation with Miss Louise Alfsen, the coördinator.

Specializing in the clinical nursing fields now being emphasized because of the war emergency, Miss King will give special attention to work in pediatrics, communicable diseases, and surgical and medical procedures.

The program was provided by a $48,690 grant to Wayne from the Surgeon-General of the United States in October, and is being carried out under Wayne supervision in nine schools of nursing and affiliate schools.—*Wayne University Newsletter,* December 17, 1941.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

GOULD'S MEDICAL DICTIONARY. Words and Phrases Generally Used in Medicine and the Allied Sciences, with Their Pronunciation and Derivation. Edited by C. V. Brownlow. Fifth Revised Edition. Philadelphia: The Blakiston Company, 1941. Price: Plain, $7.00; Thumb-Index, $7.50.

The fifth edition of a dictionary originally published in 1890 contains several hundred new words and many corrected older definitions which the advances of medicine and chemistry have made necessary. A departure from the usual procedure in the use of a separate table of prefixes and suffixes is commendable in that it simplifies the identification of complex words. It is a well printed, well organized dictionary and highly recommended to any physician.

THE ESSENTIALS OF OCCUPATIONAL DISEASES. By Jewett V. Reed, B.S., M.D., F.A.C.S., and A. K. Harcourt, B.S., M.D., Indianapolis, Indiana. Springfield, Ill.: Charles C. Thomas, 1941. Price: $4.50.

The authors have been pioneers in this specialty in Indiana and their experiences are added to a general treatment of this broad subject. The material is well arranged and readable. The book is recommended to the physician or surgeon interested in industrial health.

WARD TEACHING. Methods of Clinical Instruction. By Anna M. Taylor, M.A., R.N., Supervisor of Clinical Instruction and Staff-Nurse Instruction, Massachusetts General Hospital. Philadelphia: J. B. Lippincott Company, 1941. Price: $3.75.

An excellent well written instruction book for the nurse or the physician who does ward teaching of nurses. It is very complete and practical. The conscientious use of this material should produce better nurses.

CANCER OF THE FACE AND MOUTH. Diagnosis, Treatment, Surgical Repair. By Vilray P. Blair, M.D., Sherwood Moore, M.D., and Louis T. Byars, M.D., St. Louis. Illustrated. St. Louis: The C. V. Mosby Company, 1941. Price: $10.00.

From observations made during the past twenty years by these authors in approximately fifteen hundred cases of epithelial malignancy arising in or about the face and mouth, combined surgical and radiological measures are advocated. The volume is beautifully illustrated both with photographs in series and schematic drawings of operative procedures. The photographs are exceptional and striking in effect. The typography is excellent and well organized. It is recommended highly to any surgeon or general practitioner interested in this study.

TELEPATHY. In Search of a Lost Faculty. Eileen J. Garrett. With Introduction by Eugene Rollin Corson, B.S., M.D. New York: Creative Age Press, Inc., 1941. Price: $2.50.

The author, a well-known medium, discusses her experiences and reactions and seeks objectively to prove the reactions by subjective evidence. This rather unusual discussion of an accepted phenomenon provides interesting reading and is recommended to those of mature but not decadent mind.

THE ART AND SCIENCE OF NUTRITION. A Textbook on the Theory and Application of Nutrition. By Estelle E. Hawley, Ph.D., and Grace Carden, B.S., The University of Rochester School of Medicine and Dentistry, Rochester, N. Y. With 140 illustrations including 12 in color. St. Louis: The C. V. Mosby Company, 1941. Price: $3.50.

This book is prepared principally for the nurse who today must be trained to assume the detailed planning of the diet and to know why and what adaptions are necessary in various diseases and conditions. The authors believe the busy doctor seldom has time to do more than indicate the dietary treatment. This is a well organized, profusely illustrated volume, printed on green tinted paper. Many recipes and tables are included.

SHOCK TREATMENT IN PSYCHIATRY: A Manual. By Lucie Jessner, M.D., Ph.D., Resident Psychiatrist, Baldpate Georgetown, Mass.; Graduate Assistant in Psychiatry, Massachusetts General Hospital; Assistant in Psychiatry, Beth Israel Hospital, Boston; and V. Gerard Ryan, M.D., Associate Psychiatrist, Elmcrest Manor, Portland, Conn.; Assistant in Psychiatry, Harvard Medical School. Introduction by Harry C. Solomon, M.D., Clinical Professor of Psychiatry, Harvard Medical School; Chief of Therapeutic Research, Boston Psychiatric Hospital. New York: Grune & Stratton, Inc., 1941. Price: $3.50.

The production of psychic alterations by insulin, metrazol or electric current is presented in this brief practical review. It is of interest to the general practitioner who desires information on which to base advice given to families of patients to whom this treatment has been suggested. It is quite readable and sound.

SYNOPSIS OF THE PREPARATION AND AFTERCARE OF SURGICAL PATIENTS. By Hugh C. Ilgenfritz, A.B., M.D., Instructor in Surgery, Louisiana State University School of Medicine; Visiting Surgeon, Charity Hospital of Louisiana at New Orleans, and Rawley M. Penick, Jr., Ph.B., M.D., F.A.C.S. Professor of Clinical Surgery, Louisiana State University School of Medicine; Visiting Surgeon, Charity Hospital at Louisiana at New Orleans. With Foreword by Urban Maes, M.D., D.Sc., F.A.C.S. Professor of Surgery and Director of the Department, Louisiana State University School of Medicine; Senior Visiting Surgeon, Charity Hospital of Louisiana at New Orleans; Consulting Surgeon, Touro Infirmary. St. Louis: The C. V. Mosby Company, 1941. **Price: $5.00.**

The purpose of this volume is to serve as a practical guide for both surgical residents as well as surgical practitioners in the care of surgical patients throughout their hospital stay. It is very much condensed and so arranged that it is rather simple to use as a reference.

NAMED CO-ORDINATOR OF NURSING PROGRAM

Miss Louise Alfsen, former educational director of the Butterworth Hospital School of Nursing in Grand Rapids, has been named coördinator of the three-year undergraduate defense program administered by Wayne University for training additional students in local cooperating schools of nursing. She is a former president of the Western Michigan League of Nursing Education.

The program in which she will work was provided by a $48,690 grant to Wayne from the Surgeon-General of the United States last month, to aid Detroit's nurse-training facilities. The money was obtained through the efforts of the President of the Detroit Council of Community Nursing; Dr. Edna Noble White, in cooperation with Wayne's department of nursing and nine local hospitals.

The sum will finance the project administered by Wayne and carried on in the following schools of nursing and affiliate schools: Evangelical Deaconess, Grace, Harper, Henry Ford, Providence, St. Mary's, Children's, Herman Kiefer, and Woman's.—*Wayne University Newsletter,* November 19, 1941.

LETTERS TO THE EDITOR

Detroit, Michigan
November 18, 1941

Dear Doctor:

Congratulations on your editorial in THE JOURNAL of November, 1941, page 892, "The Doctor Comes Second." This is the first time in my experience in which a representative of this state or county medical societies has gone to bat for the most important and vital issue confronting the medical profession.

We have been talking about the individual practice of medicine while we all know that we have been regimented by the organizations and forces that you mention. The average doctor cannot break his bondage alone and his elected officers have so far either conspired to keep "the status quo" or through inertia have accomplished nothing. The hospital situation and now the insurance plan has to be solved and solved at once or otherwise the membership may become completely disgusted and lean towards any new innovation that will be destructive of the ideals of our profession.

Sincerely yours,
S. E. BARNETT

DOCTORS

Oh, I love to think of Doctors, and their art of healing wounds,
And the medicine they've established in our country side and towns,
The Medicine of America that followed out a plan
Of our sense of pride and values in the old time Doctor man,
Who, revered by all about him, was the soul of trusting care,
And, when help was needed, was the man that would be there.

It is our art in Medicine that has stood the test of time,
And stands today upon a tower, above politic grime,
And it's manly men in Medicine that have aye maintained the fight
For the ethics we believe in, which is human in its right.
Then let's pay our tribute only to our own philosophy
And continue "heads to heaven" above bureaucracy.

WEELUM

PROFESSIONAL ANNOUNCEMENTS

MEDICAL GRADUATES AND INTERNSHIP

The following interesting statistics are presented by the Prelicensure Medical Education Committee, Michigan State Medical Society:

289 interns in Michigan

- 170 medical graduates each year from the two Michigan medical colleges
- 169 Residencies in Michigan
- 177 Assistant Residencies in Michigan
- 75 Fellows in Michigan

7,200 Internships in the United States
5,000 Available Interns in the United States each year

JUDD LECTURE

Dr. Frederick A. Coller of Ann Arbor, Michigan, Professor and Director of the Department of Surgery at the University of Michigan Hospital, will give the ninth E. Starr Judd lecture at the University of Minnesota in the Chemistry Auditorium on Wednesday, January 21, 1942, at 8:15 P.M. The subject of Dr. Coller's lecture is "A Review of Studies on Water and Electrolyte Balance in Surgical Patients."

The late E. Starr Judd, an alumnus of the Medical School of the University of Minnesota, established this annual lectureship in surgery a few years before his death.

COUNTY SECRETARIES CONFERENCE

PROGRAM ON PAGE 7

LANSING, JANUARY 25, 1942

INDEX TO ADVERTISERS

MICHIGAN MEDICAL SERVICE

L. H. Sanford Joins MMS

Mr. L. H. Sanford, former Second Deputy Commissioner of Insurance of the State of Michigan, who has had wide experience in insurance affairs in connection with the Mid-America Corporation and also C. M. Verbiest & Associates, has joined the administrative organization of Michigan Medical Service according to an announcement from the Detroit offices.

Schedule of Benefits

To the well-informed observer of medical service plans, the Schedule of Benefits is a positive indication of the type of program and the motivating philosophy of its administrators. Such an analysis is based on the extent of services listed and the amount of benefits allowed.

On this score, Michigan Medical Service compares to its advantage with other medical service plans. Visitors from numerous medical societies and medical service plans during the past two years have, almost without exception, been amazed at the scope of the Michigan Medical Service Schedule of Benefits. They have also been impressed with the fact that the benefits allowed compare favorably with the fees usually charged persons in the income groups served by Michigan Medical Service.

That the Schedule of Benefits has been acceptable to the majority of doctors is probably due to the fact that instead of arbitrarily setting an amount which ought to be accepted for the lower income groups, the benefits are, as nearly as can be determined, the actual prevailing charges for persons in these income groups. These charges have been carefully determined from the following sources:

1. A composite schedule of fees in Michigan prepared by the Committee on the Distribution of Medical Care of the Michigan State Medical Society.
2. A composite schedule based on fee schedules established by eighteen Michigan county medical societies.
3. A composite schedule of three hundred and eighty-four medical societies' fee schedules, prepared by the Bureau of Medical Economics of the American Medical Association.
4. A later composite schedule of five hundred and fifty-nine county medical societies' fee schedules, prepared by the Bureau of Medical Economics of the American Medical Association.
5. Fee schedules for medical service plans, such as those of the California Physicians' Service; Mutual Health Service, Washington, D. C.; Multnomah Medical Service Bureau, Portland, Oregon; Superior Health Association, Superior, Wisconsin; and Hawaii Medical Service Association, Honolulu.
6. Fee schedules for groups such as the Ontario Medical Association, Farm Security Administration, U. S. Veterans' Bureau, Workmen's Compensation schedules, and others.
7. Recommendations from special committees of several county medical societies—Wayne, Calhoun, and others.
8. Review of the level of benefits by the House of Delegates of the Michigan State Medical Society (September, 1939).

Special committees representing the various fields of medical practice have been invited to review the sections of the Schedule of Benefits pertaining to their fields, and to consider items to be added to the schedule. Some of these committees represent the Michigan Branch of the American Urological Society, the Detroit Ophthalmological Society, the Michigan Association of Roentgenologists, the Detroit Roentgen and Ray Society, the Michigan Association of Obstetricians and Gynecologists, the Michigan Dermatological Society, the Michigan Society of Clinical Pathologists, and the Michigan Allergy Society.

Unusual Services

It is practically impossible to include in one fee schedule all the services whch may be rendered by physicians. The list of benefits does include most of the usual services but from time to time reports are received for services for which there is no precedent. These are handled in the following manner: The Medical Advisory Board obtains from doctors in that particular field of medical practice information as to the usual charge for this service to persons in the income group served by Michigan Medical Service. This customary charge is used by the Medical Advisory Board in determining payments for sub-

(Continued on Page 94)

(Continued from Page 92)

sequent services. From experience in paying numerous medical bills and with the advice of the various specialty committees, the Schedule of Benefits will be extended and revised according to the prevailing charges in Michigan.

When the Schedule of Benefits is compared by an individual physician with the charge he usually makes, the following should be kept in mind:

1. The amounts in the schedule are the charges made by the majority of physicians in Michigan and represent the consensus as to what is the prevailing charge for persons in the lower income group.
2. The Schedule is used only as a guide by the Medical Advisory Board. Each case is determined on its own merits and all the circumstances surrounding each particular case are considered in the amount of payment authorized.
3. For services to persons in the under-income group enrolled in Michigan Medical Service, there will be no loss of income because of charity or patients who fail to pay their bills. (Unremunerated services in the general population amount to at least 25% of a doctor's total annual charge.)
4. Payments for those subscribers whose incomes exceed the specified limits apply only as a credit on the doctor's bill. The doctor may bill such a subscriber directly for any difference between the amount authorized by Michigan Medical Service and his usual charge to persons in the higher income group.

COUNTY MEDICAL SOCIETY MEETINGS

Bay-Arenac-Iosco—Wednesday, January 14, 1942—Bay City—Speaker: Harry M. Nelson, M.D., Detroit—Subject: "Ovarian Tumors"

Calhoun—Tuesday, January 6, 1942—Battle Creek—Speakers: D. E. Jayne, Direcor of Local Civilian Defense, and J. E. Rosenfeld, M.D., Chief of Emergency Medical Services

Genesee—Tuesday, December 16, 1941—Flint—Speaker: Haven Emerson, M.D., New York City
Tuesday, January 13, 1942—Flint—State Society Night for 6th District.

Ingham—Tuesday, January 20, 1942—Lansing—President's Night—Speaker: Judge Homer A. Ramey, Municipal Court, Toledo, Ohio

Ionia-Montcalm—Tuesday, January 13, 1942—Ionia—Speaker: Vernor M. Moore, M.D., Grand Rapids—Subject: "Radiotherapy of Some Gynecological Conditions"

Jackson—Thursday, December 11, 1941—Jackson—Annual Banquet

Kent—Tuesday, January 13, 1942—Grand Rapids—Speakers: Leon DeVel, M.D., Dewey R. Heetderks, M.D., Jay Venema, M.D., Joseph McKenna, M.D., all of Grand Rapids, participating in a round table discussion on "The Common Cold and Its Complications"

Oakland—Wednesday, January 7, 1942—Rotunda Inn—Speaker: Clair E. Folsome, M.D., New York City—Subject: "Maternal Health Program of Oakland County"

St. Clair—Tuesday, December 23, 1941—St. Clair—Annual Meeting Tuesday, January 13, 1942—Port Huron—Speaker: B. J. Ashley, M.D., Detroit—Subject: "Treatment of Shock in War and Civilian Life."

St. Joseph—Thursday, January 8, 1942—Constantine—Speaker: Matthew Peelen, M.D., Kalamazoo—Subject: "Varicose Veins and Their Treatment"

Shiawassee—Thursday, January 15, 1942—Owosso—Speaker: Warren Wheeler, M.D., Detroit—Subject: "Care of the Premature"

West Side (Wayne)—Wednesday, January 21, 1942—Detroit—Speakers: Don Jaffar, M.D., David Sugar M.D., Eugene Steinberger, M.D., and Robert J. Hall, M.D., all of Detroit

Wayne—Monday, January 12, 1942—Detroit—Speaker: George B. Eusterman, M.D., Rochester, Minnesota—Subject: "Problem of Gastric Carcinoma: Personal Observations on Manifestations of the Disease in its Earliest Stages."

Monday, January 19, 1942—Detroit—General Practice Meeting—Symposium on "The Early Diagnosis of Cancer" conducted by S. E. Gould, M.D., Detroit. Speakers: O. A. Brines, M.D., H. P. Doub, M.D., Claire L. Straith, M.D., W. A. Hudson, M.D., H. J. Kullman, M.D., T N. Horan, M.D., H. I. Kallet, M.D., W. L. Sherman, M.D., H. C. Saltzstein, M.D., Harry M. Nelson, M.D., George Kamperman, M.D., and C. J. Smyth, M.D.

Monday, January 26, 1942—Detroit—Surgical Section Meeting—Symposium on Fractures.

Monday, February 2, 1942—Detroit—Annual Beaumont Lecture—Speaker: Charles C. Higgings, M.D, Cleveland, Ohio—Subject: "Renal Lithiasis, Its Nature, Causation, Prevention and Treatment."

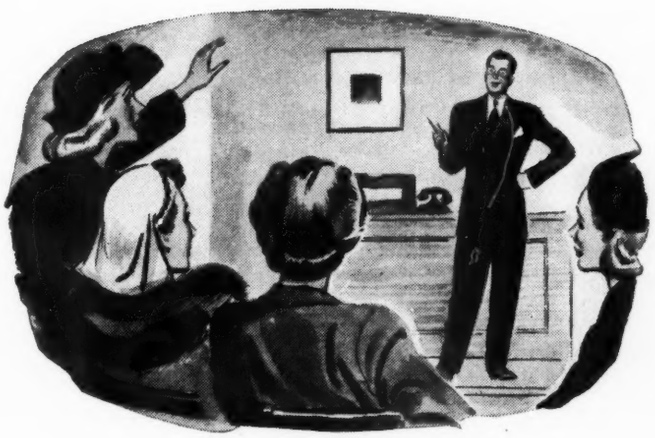
Monday, February 9, 1942—Detroit—Second Beaumont Lecture—Medical Section meeting.

COUNCIL AND COMMITTEE MEETINGS

1. Medical Preparedness Committee—Wednesday, January 14, 1942—Wardell Hotel, Detroit—6:30 p.m.
2. Syphilis Control Committee—Thursday, January 15, 1942—Hotel Olds, Lansing—6:30 p.m.
3. County Societies Committee of The Council—Friday, January 16, 1942—Statler Hotel, Detroit—6:30 p.m.
4. Finance Committee of The Council—Friday, January 16, 1942—Statler Hotel, Detroit—6:30 p.m.
5. Publication Committee of The Council—Friday, January 16, 1942—Statler Hotel, Detroit—6:30 p.m.
6. Annual Meeting of The Council—Saturday and Sunday, January 17 and 18, 1942—Statler Hotel, Detroit.
7. Iodized Salt Committee—Saturday, January 17, 1942—Detroit Club, Detroit—10:00 a.m.
8. Public Relations Committee—Saturday, January 24, 1942—Hotel Olds, Lansing—6:30 p.m.

LAW BARS ALIEN DOCTORS

Doctors who are citizens of countries which deny licenses to U. S. physicians are denied the privilege of entering private practice in California, under a new law in that State. Governor Culbert L. Olson's previous veto of the measure was overridden by both houses of the legislature. Canadian doctors and aliens already serving internships here are not affected by the new legislation. —*Illinois Medical Journal,* November, 1941.



Q. Canning's a pretty old method of preserving foods, isn't it?

A. No. On the contrary it's comparatively new. Methods of food preservation, such as smoking and drying fish and meats, are thousands of years old. However, canning was first successfully employed in the early years of the 19th century. The improvements of modern canning procedures are the direct outgrowth of many achievements of modern science. (1)

American Can Company, 230 Park Avenue, New York, N. Y.

---

(1) 1811. The Art of Preserving All Kinds of Animal and Vegetable Substances for Several Years, M. Appert, Black, Perry and Kingsbury, London.
1938. Food Research 3, 13.
1938. Ibid. 3, 91
1939. Canned Food Reference Manual, American Can Company, New York
1941. Ind. Eng. Chem. 33, 292

The Seal of Acceptance denotes that the nutritional statements in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

✶ HALF A CENTURY AGO ✶

THE WORK AND PAY OF HEALTH OFFICERS

HENRY B. BAKER, M.D.
Lansing, Michigan

Mr. President and members of the State Medical Society:

I wish first of all, to thank the section of Practice of Medicine for this opportunity to place before you what I have to offer. I have assumed that I would be expected to deal with some subject likely to be of interest to the general practitioners, and which my own occupation might enable me to have more than ordinary opportunities for studying. Inasmuch as the State law now requires that, wherever it is practicable, every health officer shall be a physician, and there are now fifteen hundred health officers chosen in Michigan every year, there is a possibility of my subject being of interest to a considerable proportion of the general practitioners in the State, because many of them may, at some time, be health officers, and because if my views were to be carried out, nearly fifteen hundred practitioners would devote the greater part of their energies to official duties, and not to the practice of medicine.

Although the title of this address is "The Work and Pay of Health Officers," I desire, at this time, to deal especially with the subject of pay. My belief is that the compensation of the health officers generally, throughout the State, with only a few exceptions, is ridiculously small and inadequate; and that the best interests of all concerned are injured thereby, and will be best conserved by such a general change as shall recognize the fact, as old as the scriptures, that the "laborer is worthy of his hire" or reward. I suppose it is not necessary for me to laboriously prove that this proposed change would be a good thing for the medical profession in this State; if it is ever questioned I will try to prove it, on some other occasion; but it may not, at first glance, be so apparent that it would be a good thing for the sanitary interests of the whole people of the State. Therefore the reasons for a belief that such is the fact may well be stated.

At first thought, it might seem that gratuitous services by physicians acting as health officers would always be for the best interests of the people generally; and, in the beginning of any movement for sanitary reform, it undoubtedly is for the best interests of the people. The people of Michigan owe a great debt of gratitude to the philanthropic physicians throughout this State who have generously performed services for the public which the people generally were not sufficiently informed to ask for, to pay for, or to appreciate, but which have tended to place Michigan in the front rank of progress in sanitary reform. The officers and members of this State Medical Society, especially, have contributed very greatly to place Michigan in the lead in sanitary progress.

But, in the evolution of organized society, there come times when methods which have served exceedingly useful purposes need to undergo slight modification in order better to fit them for the changed conditions. In my opinion, the time has arrived when it will best serve the people of Michigan to gradually educate them into a knowledge of the real value of public-health work, and into an appreciation of the fact that it is best for corporations and governments, townships, cities, and villages, as it has long been known to be best for individuals, not to try to get something for nothing. In the long run, an effort to get something for nothing is unsuccessful. Such efforts generally lead the individual to the penitentiary, and the government to a penitential mood.

The people have gradually so increased in appreciation of the importance of public-health work that their representatives, the law makers, have provided so much work to be done by health officers, and have affixed to the non-performance of the duties such penalties, that no ordinary practitioner can, without adequate compensation,

(Continued on Page 98)

Presented at the Twenty-seventh Annual Meeting of the Michigan State Medical Society in Flint, May 5 and 6, 1892.

(Continued from Page 96)

afford to take the chances of being held accountable under the law for the neglect of official duty. But the main reason why it does not now seem to be best that the duties of the health officer should generally be performed gratuitously, is that no ordinary practitioner can afford to, and it is getting so that generally no competent physician will, for any small sum, neglect his practice and do all that the law and public sentiment now expect to be done by the health officer.

The amount of service that is now required of the health officer is frequently not appreciated by the physician until he has accepted the office, when he finds that, owing to comparatively recent laws, more is required of him that he anticipated.

What is needed is some method whereby not only the physicians, but the people generally, who have to pay the health officers, shall become informed of the nature, extent, and importance of the work of the health officer. It seems to me that, as might have been expected from the occupation, those who have managed the school interests in Michigan have shown most wisdom in their methods of impressing the people with the importance of their work, and also in obtaining from the people the necessary money to carry on the school work. We need to adopt their methods. Whoever will examine his receipt for taxes will find that the main items are for school purposes. Yet the people vote to assess themselves for those purposes, after the subject has been carefully put before them. And those who have the interests of the schools in charge have opportunity, and they carefully prepare and put before the people every year, at the school meeting in September, the amounts of money which it is estimated should be used for school purposes, and facts and reasons why those amounts are needed. There should be a law similar to the school law, relative to public-health affairs. Surely the interests of the health and life of the whole people, including the children, are of more consequence than the school education of the children alone.

All that is required to make this apparent, is such an opportunity as the school laws provide for placing the facts before the people at the time the vote is taken to adopt the estimates of those who have this branch of the public service in charge.

How to Get Money for Public-Health Work

Have a public meeting of citizens of the city, village, or township, at which meeting the amount of money to be assessed and collected for public-health purposes shall be voted upon. Have the local board of health present to that meeting estimates of the amounts proper to be collected. The health officer should be prepared, and should present to this public meeting, the facts and reasons why expenditures for public-health work are in the public interests. It ought not to be difficult to convince the people generally that the lives and health of the people themselves are of more consequence than any other subject for which they collect taxes.

Let us suppose that opportunity is given the health officer to put before the people of a township, village, or city the facts and reasons for public-health work; what can be presented?

This can be presented:

1. The health officer can assure the people that, if they are situated in the average locality in Michigan, the death rate will average about 17 per thousand inhabitants per year; that, of those deaths, about 11.8 per cent will be from consumption, 6.5 from diphtheria, 2.7 from scarlet fever, and 3.2 from typhoid fever. He can assure the people that these are all communicable diseases, that they are all preventable, through measures which are now well known to sanitarians; and, what is more important, he can assure them that reliable statistics, collected by the Michigan State Board of Health, from the experience of local officers in Michigan, have proved that (even after the disease has been introduced) about seventy-five or eighty per cent of the cases and deaths from diphtheria and from scarlet fever are prevented by measures which a good health officer, acting in accordance with our present laws, and supported by the people of his locality, can inaugurate and maintain. Knowing approximately the population of the township, village, or city, the health officer can readily compute the saving of life which such a saving as has been proved to occur under such measures, would be for the number of inhabitants. Let us suppose a small city, of four thousand inhabitants—then the deaths from all causes, at the rate of 17 per thousand per year, would be 68; the deaths from consumption (11.8 per cent) would be 8; the deaths from diphtheria (6.5 per cent) would be

(Continued on Page 100)

(Continued from Page 98)

about 4½ (4.4); the deaths from scarlet fever (2.7 per cent) would be nearly two (1.8); the deaths from typhoid fever (3.2 per cent) would be a little over two. If seventy-five per cent of these deaths were to be prevented, there would be a saving of the lives of about three persons from death by diphtheria, about one from scarlet fever, and one from typhoid fever. These five persons constitute a part of the productive energy of the city upon which its prosperity depends. They are worth to the city, for what has been expended to raise them, and for what they will earn in excess of costs of maintenance, at least as much each as a good slave would sell for before the war, which was about the same as the statisticians compute as the value of an ordinary laborer—say, for the adult person, one thousand dollars, and for each of the children one-half of that amount. The four who are saved from diphtheria and scarlet fever would be likely to be children, while the one saved from typhoid fever would be likely to be in the prime of life. The actual money value of the five persons, therefore, would be three thousand dollars. If a city of four thousand inhabitants should vote to use three thousand dollars per year in public health work, I have no doubt whatever but the five lives, above mentioned, could be saved, from those three diseases alone; and probably lives could be saved from other diseases. Then how much better to save those lives, and avoid the grief and sorrow which would result from their loss. Again, the money used would be only the amount which, without effort for restriction, would be lost to the city—the actual outlay would not be at all increased. It seems to me that any meeting of citizens, of ordinary intelligence, could be made to see that the lack of public-health work is a wasteful extravagance, and that it is better to use a certain sum of money to pay a health officer than to permit the death of loved ones that have actually cost as much as that sum, and who, if they die, are a dead loss, in more than one sense.

The facts are applicable to every locality in Michigan, making allowance for a greater or a less number of inhabitants.

This may seem to be an unusual topic for the annual address which we denominate an "Oration"; but I believe it is one in which the medical profession have great interest, and certainly should have great influence in its decision. I have given you some of the reasons why I favor legal provision for the presentation locally, to all voters throughout the State, of the benefits to be expected from sanitary work, after the manner of the meetings to determine the amounts of money to be raised for school purposes.

I know that it is not customary to discuss "Orations"; but this is a practical subject, of considerable general interest to the entire profession. If agreeable to the society, I shall be glad to have the subject discussed.

NEW COUNTY MEDICAL SOCIETY OFFICERS

Allegan
President—W. C. Medill, M.D., Plainwell
Vice President—H. M. Benning, M.D., Allegan
Secretary—E. B. Johnson, M.D., Allegan
Treasurer—L. C. Shepard, M.D., Otsego
Delegate—R. J. Walker, M.D., Saugatuck
Alternate Delegate—H. H. Johnson, M.D., Martin

Alpena-Alcona-Presque Isle
President—J. W. Purdy, M.D., Long Rapids
Vice President—E. W. Hier, M.D., Alpena
Secretary—H. Kessler, M.D., Alpena
Delegate—W. E. Nesbitt, M.D., Alpena
Alternate Delegate—A. R. Miller, M.D., Harrisville

Berrien
President—Fred Henderson, M.D., Niles
Vice President—Frank Belsley, M.D., Benton Harbor
Secretary-Treasurer—R. C. Conybeare, M.D., Benton Harbor
Delegate—A. F. Bliesmer, M.D., St. Joseph
Alternate Delegate—Donald Thorup, M.D., Benton Harbor

Branch
President—Robert Fraser, M.D., Coldwater
Vice President—N. J. Walton, M.D., Quincy
Secretary-Treasurer—James Bailey, M.D., Bronson
Delegate—R. L. Wade, M.D., Coldwater
Alternate Delegate—Samuel Schultz, M.D., Coldwater

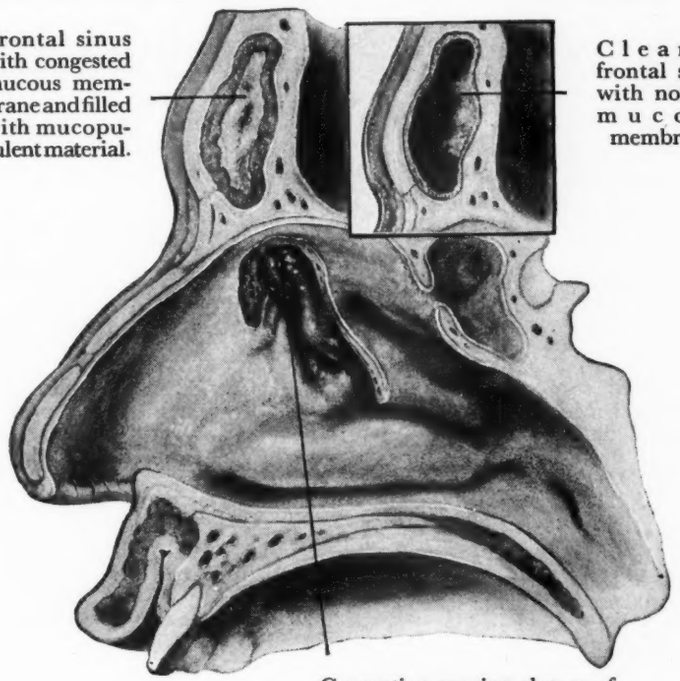
Cass
President—George Loupee, M.D., Dowagiac
Vice President—F. G. Rice, M.D., Cassopolis
Secretary-Treasurer—John K. Hickman, M.D., Dowagiac
Delegate—S. L. Loupee, M.D., Dowagiac
Alternate Delegate—K. C. Pierce, M.D., Dowagiac

Chippewa-Mackinac
President—G. A. Conrad, M.D., Sault Ste. Marie
Vice President—Donald Cowan, M.D., Sault Ste. Marie
Secretary-Treasurer—L. J. Hakala, M.D., Sault Ste. Marie
Delegate—L. M. McBryde, M.D., Sault Ste. Marie
Alternate Delegate—W. F. Mertaugh, M.D., Sault Ste. Marie

Delta-Schoolcraft
President—N. J. Frenn, M.D., Bark River
Vice President—D. H. Boyce, M.D., Escanaba
Secretary—A. C. Bachus, M.D., Powers
Delegate—J. W. Walch, M.D., Escanaba
Alternate Delegate—W. A. LeMire, M.D., Escanaba
Legal Consultant—S. Kitchen, M.D., Escanaba

(Continued on Page 102)

PATHOLOGY OF THE UPPER RESPIRATORY TRACT



CATARRHAL INFLAMMATION OF THE FRONTAL SINUS

The above illustration demonstrates the route of infection to the frontal sinuses—demonstrates, too, the need for adequate drainage of the area. To shrink congested nasal mucous membranes quickly—to establish adequate drainage with more prolonged effect than ephedrine, may we recommend

NEO-SYNEPHRIN HYDROCHLORIDE

(laevo-alpha-hydroxy-beta-methyl-amino-3 hydroxy ethylbenzene hydrochloride)

DOSAGE FORMS:

SOLUTION—¼% in saline solution (½ oz. and 1 oz. bottles)
1% in saline solution (½ oz. and 1 oz. bottles)
¼% in Ringer's Solution with Aromatics (½ oz. and 1 oz. bottles)

EMULSION—¼% low surface tension (½ oz. and 1 oz. bottles)

JELLY —½% in collapsible tube with applicator

ACCEPTED AMERICAN MEDICAL ASSN. Council on Pharmacy and Chemistry


SOLUTION


EMULSION


JELLY

FREDERICK STEARNS & COMPANY, Detroit, Michigan

New York Kansas City San Francisco Windsor, Ontario Sydney, Australia

(Continued from Page 100)

Eaton
President—C. J. Sevener, M.D., Charlotte
Vice President—Paul Engle, M.D., Olivet
Secretary—B. P. Brown, M.D., Charlotte
Treasurer—H. W. Hannah, M.D., Charlotte
Delegate—Don V. Hargrave, M.D., Eaton Rapids
Alternate Delegate—Paul Engle, M.D., Olivet

Gogebic
President—C. E. Stevens, M.D., Bessemer
Vice President—M. J. Gullickson, M.D., Ironwood
Secretary-Treasurer—Frank L. S. Reynolds, M.D., Ironwood
Executive Secretary—Mr. J. A. Blaha, Ironwood
Delegate—W. E. Tew, M.D., Bessemer
Alternate Delegate—H. T. Nezworski, M.D., Ramsay
Board of Directors—W. E. Tew, M.D., Bessemer
A. J. O'Brien, M.D., Ironwood
C. C. Urquhart, M.D., Ironwood

Gratiot-Isabella-Clare
President—D. K. Barstow, M.D., St. Louis
Vice President—D. M. Howell, M.D., Alma
Secretary-Treasurer—E. S. Oldham, M.D., Breckenridge
Delegate—M. G. Becker, M.D., Edmore
Alternate Delegate—W. L. Harrigan, M.D., Mt. Pleasant

Ingham
President—O. M. Randall, M.D., Lansing
President-Elect—C. B. Gardner, M.D., Lansing
Secretary—R. J. Himmelberger, M.D., Lansing
Treasurer—C. R. Doyle, M.D., Lansing
Delegates—L. G. Christian, M.D., Lansing (3 years)
C. F. DeVries, M.D., Lansing (2 years)
T. I. Bauer, M.D., Lansing (1 year)
Alternate Delegates—Robert S. Breakey, M.D., Lansing
R. L. Finch, M.D., Lansing
C. S. Davenport, M.D., Lansing

Ionia-Montcalm
President—J. J. Johns, M.D., Ionia
Vice President—Carl Hansen, M.D., Stanton
Secretary-Treasurer—John J. McCann, M.D., Ionia
Delegate—W. L. Bird, M.D., Greenville
Alternate Delegate—L. L. Marston, M.D., Lakeview

Jackson
President—L. L. Stewart, M.D., Jackson
President-Elect—Philip A. Riley, M.D., Jackson
Secretary—Horace Wray Porter, M.D., Jackson
Treasurer—John B. Holst, M.D., Jackson
Delegates—H. A. Brown, M.D., Jackson
J. J. O'Meara, M.D., Jackson
Alternate Delegates—C. S. Clarke, M.D., Jackson
C. R. Dengler, M.D., Jackson

Lapeer
President—D. J. O'Brien, M.D., Lapeer
Secretary-Treasurer—H. M. Best, M.D., Lapeer
Delegate—D. J. O'Brien, M.D., Lapeer
Alternate Delegate—H. M. Best, M.D., Lapeer

Lenawee
President—E. T. Morden, M.D., Adrian
Vice President—L. J. Stafford, M.D., Adrian
Secretary-Treasurer—George H. Wynn, M.D., Adrian

Livingston
President—Harold C. Hill, M.D., Howell
Secretary-Treasurer—Duncan A. Cameron, M.D., Brighton
Delegate—D. C. Stephens, M.D., Howell
Alternate Delegate—H. G. Huntington, M.D., Howell

Luce
President—A. T. Rehn, M.D., Newberry
Vice President—C. B. Toms, M.D., Newberry
Secretary-Treasurer—Sidney Franklin, M.D., Newberry
Delegate—Henry E. Perry, M.D., Newberry
Alternate Delegate—Robert E. Spinks, M.D., Newberry

Manistee
President—E. B. Miller, M.D., Manistee
Vice President—Ward Norconk, M.D., Bear Lake
Secretary-Treasurer—C. L. Grant, M.D., Manistee
Delegate—E. A. Oakes, M.D., Manistee

Marquette-Alger
President—Warren Lambert, M.D., Marquette
President-Elect—George Wickstrom, M.D., Munising
Secretary-Treasurer—D. P. Hornbogen, M.D., Marquette
Delegate—V. Vandeventer, M.D., Ishpeming
Alternate Delegate—R. A. Burke, M.D., Palmer

Medical Society of North Central Counties
President—Lawrence LaPorte, M.D., Gladwin
Vice President—Leland Sargent, M.D., Kalkaska
Secretary-Treasurer—C. G. Clippert, M.D., Grayling

Midland
President—Edward Meisel, M.D., Midland
Vice President—K. Haitinger, M.D., Midland
Secretary-Treasurer—Harold H. Gay, M.D., Midland
Delegate—Irvin Howe, M.D., Midland
Alternate Delegate—Robert Ballmer, M.D., Midland

Muskegon
President—Ernest N. D'Alcorn, M.D., Muskegon
President-Elect—H. B. Loughery, M.D., Muskegon
Secretary-Treasurer—Thomas J. Kane, M.D., Muskegon
Delegates—Ernest N. D'Alcorn, M.D., Muskegon
Shattuck W. Hartwell, M.D., Muskegon
Alternate Delegate—Leland E. Holly, M.D., Muskegon
Henry J. Pyle, M.D., Muskegon

Northern Michigan
President—Guy C. Conkle, M.D., Boyne City
Vice President—John Rodgers, M.D., Bellaire
Secretary-Treasurer—A. F. Litzenburger, M.D., Boyne City
Delegate—Fred Mayne, M.D., Cheboygan
Alternate Delegate—G. B. Saltonstall, M.D., Charlevoix

St. Clair
President—W. A. Schaefer, M.D., Port Huron
President-Elect—K. B. LeGalley, M.D., Port Huron
Secretary-Treasurer—Jacob H. Burley, M.D., Port Huron
Delegate—W. H. Boughner, M.D., Algonac
Alternate Delegate—D. W. Patterson, M.D., Port Huron

Van Buren
President—Wm. R. Young, M.D., Lawton
President-Elect—Philip Sayre, M.D., South Haven
Secretary—J. W. Iseman, M.D., Paw Paw
Treasurer—A. H. Steele, M.D., Paw Paw
Delegate—Wm. R. Young, M.D., Lawton
Alternate Delegate—Wm. Bope, M.D., Decatur
Board of Ethics—W. F. Hoyt, M.D., Paw Paw
Council Member—Charles Ten Houten, M.D., Paw Paw

Washtenaw
President—Dean W. Myers, M.D., Ann Arbor
President-Elect—C. B. Pillsbury, M.D., Ypsilanti
Secretary-Treasurer—R. K. Ratliff, M.D., Ann Arbor
Delegates—J. A. Wessinger, M.D., Ann Arbor
Dean W. Myers, M.D., Ann Arbor
H. M. Beebe, M.D., Ann Arbor
W. M. Brace, M.D., Ann Arbor

Wexford-Missaukee
President—G. W. Brooks, M.D., Tustin
Vice President—C. E. Merritt, M.D., Manton
Secretary-Treasurer—Benton A. Holm, M.D., Cadillac
Delegate—W. J. Smith, M.D., Cadillac
Alternate Delegate—J. F. Gruber, M.D., Cadillac

READERS' SERVICE

VESICULAR AND VESICULOPUSTULAR ERUPTIONS OF THE HANDS AND FEET

Some of the most troublesome, though harmless, diseases of the skin involve the hands and/or feet in the form of small blisters or pustules on the thick skin of the palms, soles, fingers and toes.

The popular conception that such eruptions are a form of fungus infection (ringworm or athletes' foot) cannot be borne out by microscopic and cultural studies. Actual demonstration of fungi can be made in only five to 15 per cent of children and 30 per cent of adults. During the summer, the heat of which encourages the growth of fungi, the percentage rises to 50. Vesicular eruptions resulting from allergic reaction to external irritants as proven by a positive patch test are seen more frequently in industries than in ordinary life.

Functional studies indicate that most vesicular and vesiculopustular eruptions of the hands and feet occur as a result of perversion of the sense of fatigue and fall in the large group of functional diseases. Treatment directed toward the underlying nervous exhaustion must be added to local measures to be efficacious.—S. W. BECKER, M.D., Chicago, Illinois (See page 111).

SYMPTOMS AND THERAPY OF AUTONOMIC DYSTONIA

In the treatment of the many manifestations of dystonia of the autonomic nervous system, the author finds that in addition to psychotherapy, hydrotherapy and dietotherapy, specific mild sedation of the component branches of the nervous system is essential in the ambulatory management of these patients. A résumé of 317 cases reveals ninety per cent showing from mild to marked improvement. Bellergal was used as the sedative and cases followed for several years failed to show any deleterious effects. In three patients, because of sensitization to the bellafoline component, the drug was stopped. Because of frequency of these cases, the author urges similar investigations.—GEORGE W. SLAGLE, M.D., Battle Creek, Michigan. (See page 119.)

MENTAL DISORDERS AS CAUSE OF REJECTION IN MICHIGAN REGISTRANTS

Michigan Selective Service Headquarters assembled information furnished by Michigan Local Boards for the first 340 men rejected at Induction Stations for mental and nervous disorders. The purpose of the study was to evaluate procedures for handling mental and nervous cases in Selective Service routine. These specific questions were considered: what occupation these men followed prior to induction; what economic and social standing they had in their communities; what happened to them after their rejection; whether or not it was likely that rejection for mental disorders caused social stigma; whether or not the men were unduly concerned over the result of their psychiatric examination; whether or not rejection for this cause was a factor in preventing subsequent employment.—HAROLD A. FURLONG, M.D., MYRA E. HILPERT, A.B., and CLIFFORD H. GREVE, M.S.P.H., Lansing, Michigan. (See page 123.)

DE OFFICIIS IN ANAESTHESIA

Duties in anæsthesia are recounted in considerable detail and it is pointed out that they are consecutive and interdependent. We ought to feel bound to study the subject in order to apply our wisdom to the service of humanity, and to teach and train those who are desirous of learning. The Medical School should have a Department of Anæsthesia, adequate not only for undergraduate instruction, but to afford opportunities for the graduate who wants to be a specialist; and too, to give the personnel cause to do investigative work in the laboratory and the clinic, collaborating with members of the school's other departments. Problems discussed belong to the services attached to the preparation of the patient for anæsthesia, the selection of the anæsthetic agents and the methods of their administration, bearing in mind some harmful effects. —WESLEY BOURNE, M.D., Montreal, Canada. (See Page 129.)

OBSERVATIONS ON THE USE OF GLASSES

This presentation is offered with the hope that it will suggest to the general physician a simple way of describing certain physiologic optical principles to their patients. The normal eye is an image-forming optical instrument with a remarkable range of adaptability. Clear, comfortable vision depends primarily on a sharp image which must be formed exactly on the surface of the retina without undue effort of accommodation. In a refractive error—myopia, hypermetropia, astigmatism—the correct lens, when placed before the eye, changes the final direction of the rays of light so that on entering the eye they will be imaged on the retina. This is equivalent to placing an object at the exact position for which the eye is adapted. A refractive error is not a disease, nor can it be produced by working under unfavorable conditions. Every person must eventually become presbyopic. An explanation of accommodation and presbyopia is also included. —ALFRED COWAN, M.D., Philadelphia, Pa. (See page 134.)

MEDICAL PREPAREDNESS

RETURNS OF M.S.M.S. MEDICAL PREPAREDNESS QUESTIONNAIRES

Up to January 14, 1942

*Allegan	24
Barry	4
*Bay	79
Berrien	13
Branch	13
*Calhoun	121
Chippewa-Mackinac	14
*Clinton	13
*Dickinson-Iron	26
*Eaton	26
Genesee	143
*Gogebic	42
*Grand Traverse	46
*Hillsdale	27
Houghton-Baraga-Keweenaw	29
*Huron	13
Ingham	122
Ionia-Montcalm	12
*Kalamazoo	110
*Kent	294
Lapeer	6
*Livingston	18
Luce	1
*Macomb	44
Mason	2
*Mecosta-Osceola	18
Med. Soc. of North Central Co.	19
*Monroe	46
*Muskegon	80
*Newaygo	11
*Northern Michigan	36
*Oceana	11
*Sanilac	22
Shiawassee	1
*St. Clair	48
*St. Joseph	29
*Tuscola	24
*Van Buren	26
Wexford-Missaukee	11
Wayne	1
TOTAL	1,625

*100 per cent returns, or nearly 100 per cent. Of the forty counties from which returned questionnaires have been received, twenty-five have returned approximately 100 per cent.

LOCAL CHIEFS OF EMERGENCY MEDICAL SERVICE

Reported to January 12, 1942

Alpena—E. S. Parmenter, M.D., 140 East Washington Ave., Alpena
Bay—Wm. G. Gamble, Jr., M.D., c/o Mercy Hospital, Bay City
Calhoun—Joseph E. Rosenfeld, M.D., 12th Floor Central Tower, Battle Creek
Delta-Schoolcraft—W. A. LeMire, M.D., 1107 Ludington St., Escanaba
Grand Traverse—F. G. Swartz, M.D., Traverse City
Leelanau—Claude I. Ellis, M.D., Suttons Bay
Benzie—Frederick D. Trautman, M.D., Frankfort
Jackson—L. F. Thalner, M.D., 609 West Michigan, Jackson
Kent—Wm. R. Torgerson, M.D., Metz Bldg., Grand Rapids
Lenawee—Leo J. Stafford, M.D., Adrian
Luce—Robert E. Spinks, M.D., Newberry
Manistee—C. L. Grant, M.D., Manistee
Mason—L. J. Goulet, M.D., Ludington
Medical Society of North Central Counties—
Otsego—Joe Egle, M.D., Gaylord
Montmorency—Geo. Drescher, M.D., Lewiston
Roscommon—M. A. Martzowka, M.D., Roscommon
Ogemaw—R. J. Beebe, M.D., West Branch
Crawford—Stanley Stealy, M.D., Grayling
Kalkaska—L. E. Sargent, M.D., Kalkaska
Gladwin—Keith D. Coulter, M.D., Gladwin
Menominee—H. T. Sethney, M.D., Menominee
Newaygo—Albert C. Edwards, M.D., White Cloud
Ottawa—Wm. Westrate, M.D., Holland
—E. H. Beernink, M.D., Grand Haven
—C. E. Boone, M.D., Zeeland
—E. C. Timmerman, M.D., Coopersville
Saginaw—J. T. Sample, M.D., 402 Second Nat'l Bank Bldg., Saginaw
Van Buren—Chas. Ten Houten, M.D., Paw Paw
Washtenaw—Warren E. Forsythe, M.D., University Health Service, Ann Arbor

MEDICAL MEMBERS OF COUNTY MEDICAL ADVISORY COUNCILS

Reported to January 12, 1942

Bay—M. R. Slattery, M.D., Chairman, 919 Washington, Bay City; E. S. Huckins, M.D., Cass Avenue, Bay City; R. C. Perkins, M.D., Davidson Bldg., Bay City; W. G. Gamble, M.D., c/o Mercy Hospital, Bay City; A. D. Allen, M.D., 101 W. John, Bay City.
Calhoun—Harry F. Becker, M.D., 1009 Security Bank Bldg., Battle Creek; A. A. Hoyt, M.D., City Hall, Battle Creek (representing Health Dept.)
Delta-Schoolcraft—N. J. Frenn, M.D., Chairman, Bark River; W. A. LeMire, M.D., 1107 Ludington, Escanaba; A. C. Bachus, M.D., Powers; Fred O. Tonney, M.D., Escanaba (rep. Health Department).
Grand Traverse—B. H. VanLeuven, M.D., Traverse City; R. P. Sheets, M.D., Traverse City; E. F. Sladek, M.D., Traverse City.
Jackson—L. F. Thalner, M.D., 609 W. Michigan Ave., Jackson, Chief; T. E. Schmidt, M.D., 1105 Reynolds Bldg., Jackson; W. A. Cochrane, M.D., 511 Wildwood, Jackson; Philip A. Riley, M.D., 500 S. Jackson, Jackson; H. W. Porter, M.D., 505 Wildwood, Jackson.
Kent—Wm. R. Torgerson, M.D., Metz Bldg., Grand Rapids—Chairman; Millard W. Shellman, M.D., 923 Maxwell, Grand Rapids, Co-Chairman; L. V. Ragsdale, M.D., Butterworth Hospital, Grand Rapids; Paul W. Willits, M.D., Medical Arts Bldg., Grand Rapids.
Lenawee—E. T. Morden, M.D., Adrian; Geo. H. Wynn, M.D., Adrian (Health Dept.)
Luce—All the members of the Luce County Medical Society (12 M.D.'s).
Mason—Howard Hoffman, M.D., Ludington; C. M. Spencer, M.D., Scottville.
Menominee—F. J. Dewane, M.D., Menominee; A. R. Peterson, M.D., Daggett; C. B. Flanagan, M.D., Menominee.
Saginaw—W. K. Anderson, M.D., General Hospital, Saginaw; O. W. Lohr, M.D., 537 Millard St., Saginaw; L. A. Campbell, M.D., 405 Peoples Bldg. & Loan Bldg., Saginaw; L. C. Harvie, M.D., 405 Weichmann Bldg., Saginaw; H. G. Kleekamp, M.D., 1001 Gratiot Ave., Saginaw; W. K. Slack, M.D., 308 Eddy Bldg., Saginaw; Andre J. Cortopassi, M.D., 324 S. Washington Ave., Saginaw.
Van Buren—A. A. McNabb, M.D., Lawrence
Washtenaw—Warren E. Forsythe, M.D., University Health Service, Ann Arbor; M. E. Soller, M.D., Ypsilanti (Ch. Med. Prep. Committee); A. C. Kerlikowski, M.D., University Hospital, Ann Arbor; Otto K. Engelke, M.D., Ann Arbor (Director of Health Unit).